ORDER NO. MD0402048C1
A6

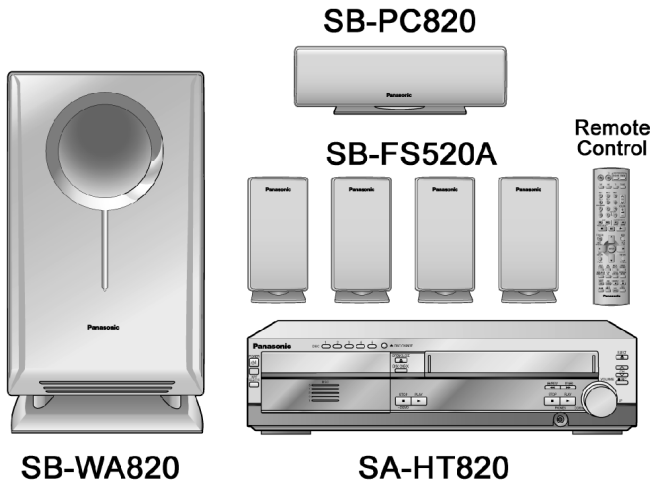
# Service Manual

## DVD/VHS Home Theater Sound System

# SA-HT820VP
# SA-HT820VPC

Colour

(S)... Silver Type




## Specifications

**n AMPLIFIER SECTION**

| | |
|---|---|
| RMS output power, 10 % total harmonic distortion | |
| 1 kHz FL/FR | 55 W per channel 6 Ω |
| 1 kHz Center | 160 W per channel 6 Ω |
| 1 kHz SL/SR | 55 W per channel 6 Ω |
| 100 Hz Subwoofer | 220 W per channel 4 Ω |
| Total RMS Dolby Digital mode power | 600 W |
| FTC output power, 1 % total harmonic distortion | |
| 120 Hz - 20 kHz FL/FR | 30 W per channel 6 Ω |
| 120 Hz - 20 kHz Center | 110 W per channel 6 Ω |
| 120 Hz - 20 kHz SL/SR | 30 W per channel 6 Ω |
| 45 Hz - 120 kHz Subwoofer | 140 W per channel 4 Ω |
| Total FTC power in Dolby Digital mode (Band 1 % THD) | 370 W |
| Input sensitivity | |
| AUX | 250 mV |
| Input impedance | 47 kΩ |

**n FM TUNER SECTION**

| | |
|---|---|
| Frequency range | 87.9 - 107.9 MHz (200-kHz step) |
| | 87.5 - 108.0 MHz (100-kHz step) |
| Sensitivity | 2.5µV (IHF) |
| S/N 26 dB | 2.2 µV |
| Antenna terminals | 75 Ω (unbalanced) |
| Preset station | 15 |

**n AM TUNER SECTION**

| | |
|---|---|
| Frequency range | 520 -1710 kHz (10-kHz step) |
| AM Sensitivity S/N 20 dB at 1000 kHz | 560 µV/m |
| Preset station | 15 |

**n DISC SECTION**

| | |
|---|---|
| Disc played | (one layer per side) |
| DVD-VIDEO/AUDIO | 8 cm/12 cm, single/double-sided, single/double layer |
| CD/VCD/MP3/WMA | 8 cm/12 cm, CD-R/RW |
| DVD-RAM/R (DVD-VIDEO formatted discs) | |
| HighMAT | Level 2 (Audio and Image) |
| Video | |
| Signal system | NTSC |
| Output level | Composite video; 1 Vp-p (75Ω) |
| | S-video; 1 Vp-p (Y), 0.286 Vp-p (C) (75Ω) |

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| | |
|---|---|
| | Component video; 1 Vp-p (Y) (75Ω) |
| | 0.7 Vp-p ($P_B/C_B$, $P_R/C_R$) (75Ω) |
| Audio | |
| Sampling frequency | |
| CD | 44.1 kHz |
| MP3 | 32 kHz, 44.1 kHz, 48 kHz |
| DVD | 48 kHz, 96 kHz (video), 192 kHz (audio) |
| Bitrate | |
| MP3 | 32-320 kbps |
| Decoding | 16/20/24 bit linear |
| Pick up | |
| Beam Source | Semiconductor Laser |
| Wavelength | |
| CD/VCD | 785 nm |
| DVD | 662 nm |
| Number of channels | 5.1 ch (FL, FR, SL, SR, C, SW) |
| Frequency response | 20 Hz - 20 kHz (+1, -2 dB) |
| Wow and flutter | Less than possible measurement data |
| Digital filter | 8 fs |
| D/A converter | Delta sigma DAC |

**n VHS SECTION**

| | |
|---|---|
| Video recording system | 2 rotary heads, helical scanning system |
| Video heads | 4 heads |
| Audio heads | 2 heads |
| Tape speed | SP; 33.35 mm/s, EP; 11.12 mm/s, VP; 6.66 mm/s |
| Tape format | VHS tape |
| Recording/playback time | SP; 120 min. with NV-T120 |
| | EP; 360 min. with NV-T120 |
| FF/REW time | Approx. 54 s. with NV-T120 (FF/REW) |
| | Approx. 36 s. with NV-T120 (JET REW) |

VIDEO

| | |
|---|---|
| Television system | EIA; Standard (525 lines, 60 fields), NTSC color signal |
| Modulation system | Luminance; FM azimuth recording |
| | Color signal; converted subcarrier phase shift recording |
| Input level | VIDEO IN (PHONO); 1 Vp-p, 75Ω |
| Output level | VIDEO OUT (PHONO); 1 Vp-p, 75Ω |
| Antenna receive input | VHF 2-13 CH, 75Ω |
| | UHF 14-69 CH, 75Ω |
| | CATV 5A and A-5-EEE CH, 75Ω |

AUDIO

| | |
|---|---|
| Input level | AUDIO IN (PHONO); -10 dBV, 47 kΩ |
| Output level | AUDIO OUT (PHONO); -8 dBV, 1 kΩ |
| Audio track | 1 track (normal-mono only), |
| | 2 channels (Hi-Fi sound stereo) |
| Video horizontal resolution | Color; more than 200 lines |
| Signal-to-Noise ratio | Video; more than 40 dB/SP |
| | Audio; more than 60 dB/Hi-Fi |
| Audio frequency response | 20 Hz-20 kHz/Hi-Fi |
| Wow and flutter | 0.005 % Wrms/Hi-Fi |

**n GENERAL**

| | |
|---|---|
| Power supply | AC 120 V, 60Hz |
| Power consumption | |
| Main unit | 38 W |
| Active subwoofer (SB-WA820P) | 250 W |
| Dimensions (W x H x D) | 430 x 105 x 352 mm |
| | (16-15/16” x 4-1/8” x 13-7/8”) |
| Mass | 5 kg (11 lb.) |
| Power consumption in standby mode | |
| BRIGHT mode | Approx. 3.5 W |
| DIM mode | Approx. 3.2 W |
| OFF mode | Approx. 1.9 W |

**n SYSTEM**

| | |
|---|---|
| SC-HT820V (P) | Main unit: SA-HT820V (P) |
| | Satellie speaker: SB-HT820 (P) |
| | Active subwoofer: SB-WA820 (PP) |
| SC-HT820V (PC) | Main unit: SA-HT820V (PC) |
| | Satellie speaker: SB-HT820 (P) |
| | Active subwoofer: SB-WA820 (PP) |

**n SPEAKER**

| | |
|---|---|
| SB-HT820V (P) | Front and surround speaker: SB-FS520A (P) x 4 |
| | Center speaker: SB-PC820 (P) x 1 |

**Notes:**

1. Specifications are subject to change without notice. Mass and dimensions are aproximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

**⚠ WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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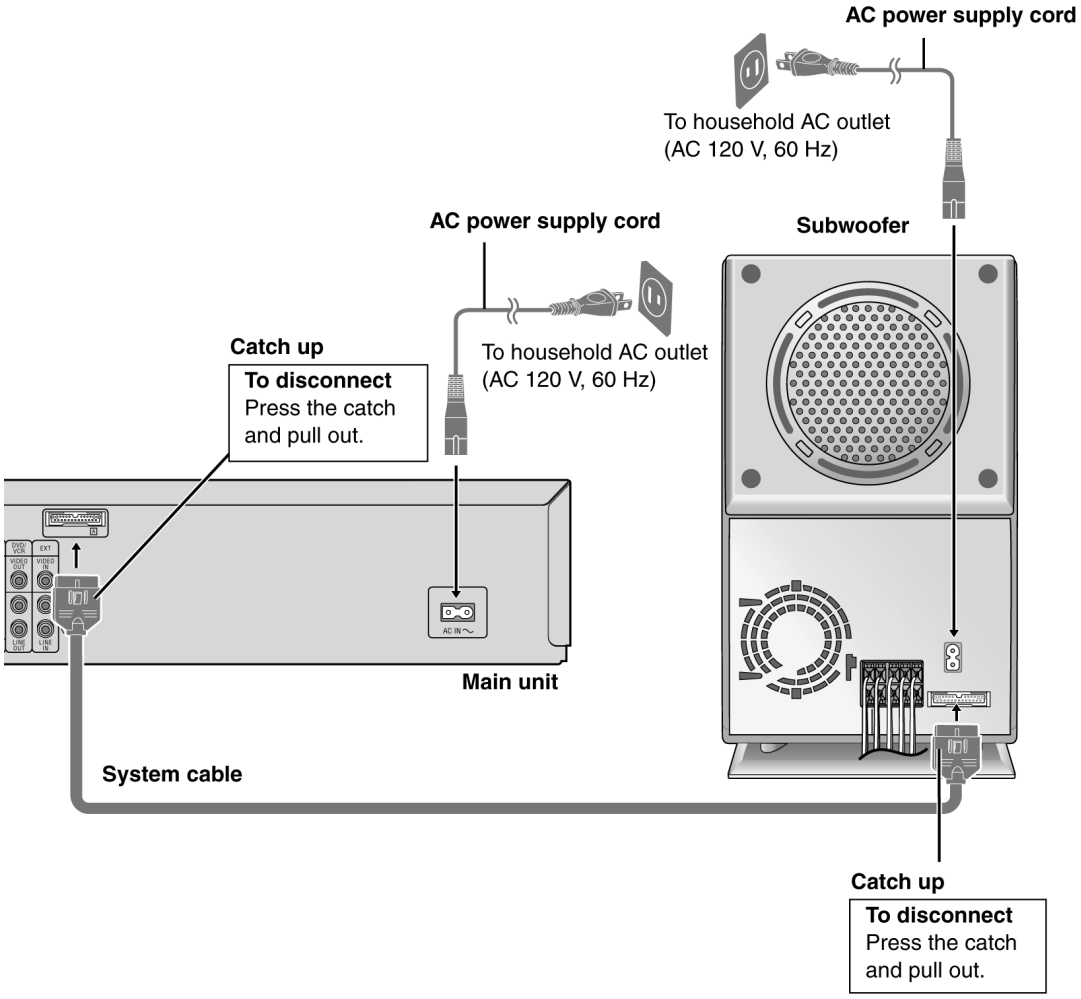
# 1 Powering Up of the Main Unit

## 1.1. Checking Player with Active Subwoofer

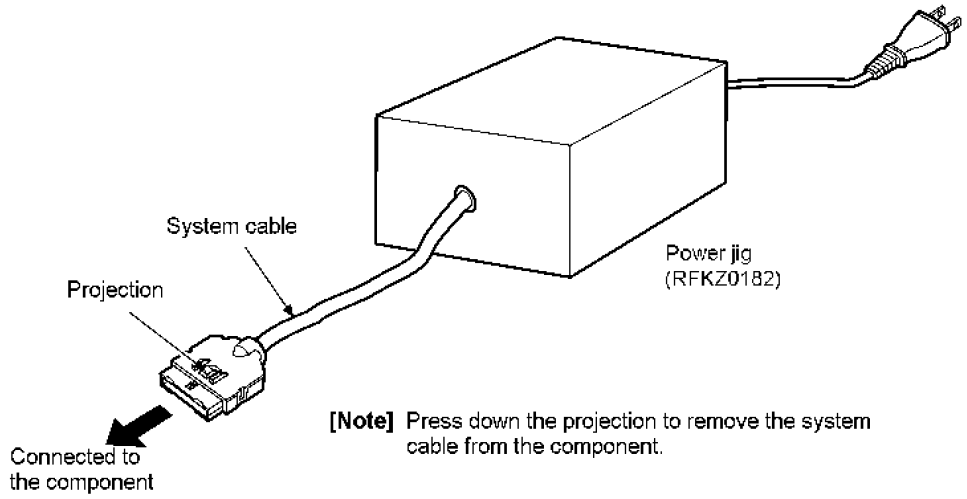
1. This unit uses the active subwoofer to supply the power of the component, and the active subwoofer should be connected to the component to check operational conditions of the component.
2. Connect both AC power supply cords to enjoy all the features of this system.
   This speakers and tuner will not work unless you connect the subwoofer to a household AC outlet.

**Connect the AC power supply cords after all other connections are complete.**




## 1.2. Using of Power Jig

1. If the active subwoofer is not available during to repair of the unit, use the following equipment.




**Jig product number**

RFKZ0182 (110V, 127V, 220V, 230V - 240V for for overseas domestic use)

# 2 Before Repair and Adjustment (Using Active Subwoofer Unit)

Disconnect AC power, discharge Power Supply Capacitors C546 , C547, C548 & C549 (from active subwoofer unit) through a 10 Ω, 1W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 120V, 60Hz in NO SIGNAL mode should be ~1000 mA [From Active Subwoofer].

# 3 Protection Circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is switched ON.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are shorted, or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlines below:

1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

**Note :**

When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

# 4 Safety Precautions

## 4.1. General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

(This “Safety Precaution” is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer’s recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

### 4.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

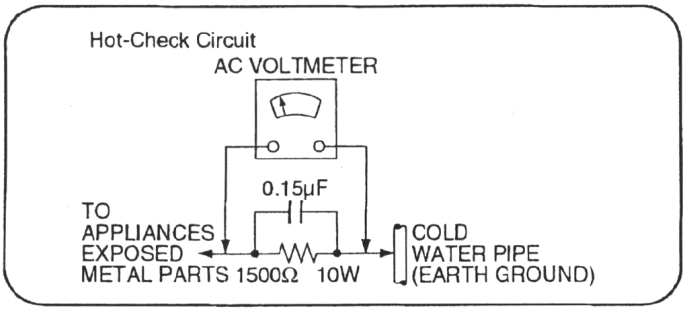



Fig. 1

### 4.1.2. Leakage Current Hot Check (See Figure 1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15µF capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is out of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

# 5 Handling the Lead-free Solder

## 5.1. About lead free solder (PbF)

**Distinction of PbF P.C.B.:**

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

**Caution:**

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).
- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

# 6 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equiped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equiped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder remover device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

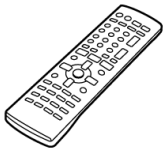
   **Caution**

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

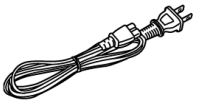
**IMPORTANT SAFETY NOTICE**

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

# 7 Accessories



Remote control

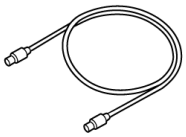


AC power supply cord

AM loop antenna

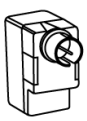
FM indoor antenna

Video cables



75Ω coaxial cable

System cable



Antenna plug

# 8 Precaution of Laser Diode

**CAUTION :**

This unit utilizes a class 1 laser.

Invisible laser radiation is emitted from the optical pickup lens.

Wavelength: 658nm(DVD)/780nm(VCD/CD).

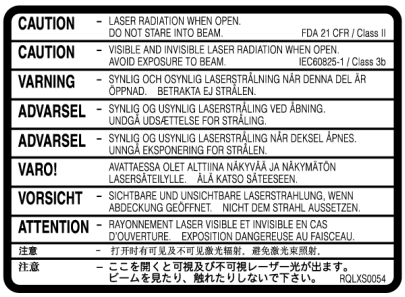
Maximum output radiation power from pickup: 100µW/VDE

When the unit is turned on :

1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.
3. Do not adjust the preset variable resistor on the pickup lens.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufacturer's specified replacement pick up only.
6. Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

**CAUTION!**
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

**n Use of Caution Labels**


CAUTION – LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21 CFR / Class II
CAUTION – VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. IEC60825-1 / Class 3b
VARNING – SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.
ADVARSEL – SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
ADVARSEL – SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VARO! AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VORSICHT – SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
ATTENTION – RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
注意 – 打开时有可见及不可见激光辐射，避免激光束照射。
注意 – ここを開くと可視及び不可視レーザー光が出ます。ビームを見たり、触れたりしないで下さい。 RQLXS0054

(Inside of product)

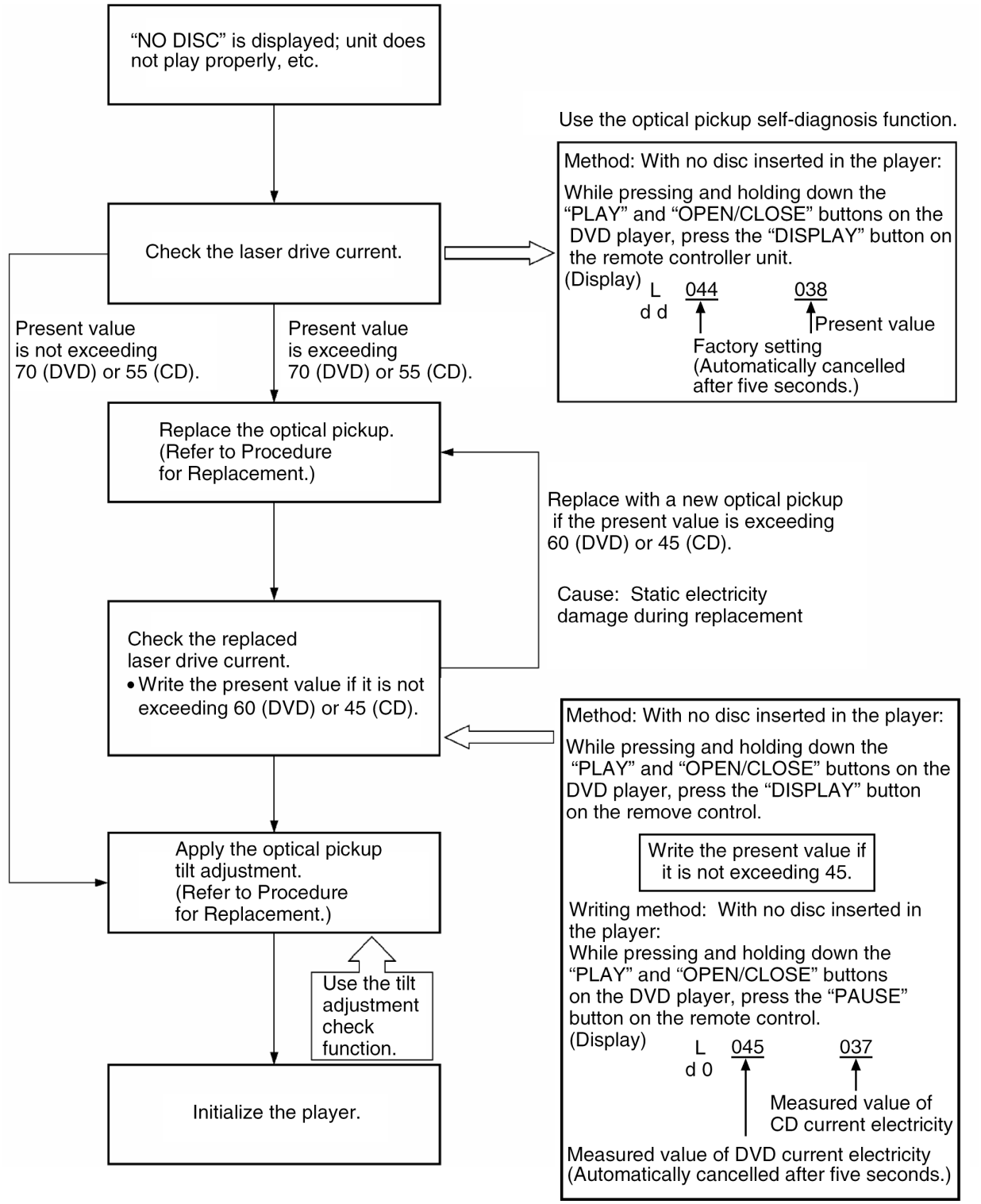
# 9 Optical Pickup Self-Diagnosis and Replacement Procedure (DVD Section)

## 9.1. Self-diagnosis

This unit is equipped with the optical pickup self-diagnosis function and the tilt adjustment check function. Follow the procedure described below during repair in order to perform self-diagnosis and tilt adjustment effectively. Especially when "NO DISC" is displayed, be sure to apply the self-diagnosis function before replacing with an optical pickup. Replacement of optical pickup generally requires when the present value of laser drive exceeds 55.

**Note:**

Start diagnosis within three minutes after turning on the power (as diagnosis fails when the unit becomes warm).


"NO DISC" is displayed; unit does not play properly, etc.
Check the laser drive current.
Use the optical pickup self-diagnosis function.
Method: With no disc inserted in the player:
While pressing and holding down the "PLAY" and "OPEN/CLOSE" buttons on the DVD player, press the "DISPLAY" button on the remote controller unit.
(Display) L d d 044 038
Factory setting (Automatically cancelled after five seconds.)
Present value
Present value is not exceeding 70 (DVD) or 55 (CD).
Present value is exceeding 70 (DVD) or 55 (CD).
Replace the optical pickup. (Refer to Procedure for Replacement.)
Replace with a new optical pickup if the present value is exceeding 60 (DVD) or 45 (CD).
Cause: Static electricity damage during replacement
Check the replaced laser drive current.
• Write the present value if it is not exceeding 60 (DVD) or 45 (CD).
Method: With no disc inserted in the player:
While pressing and holding down the "PLAY" and "OPEN/CLOSE" buttons on the DVD player, press the "DISPLAY" button on the remove control.
Write the present value if it is not exceeding 45.
Writing method: With no disc inserted in the player:
While pressing and holding down the "PLAY" and "OPEN/CLOSE" buttons on the DVD player, press the "PAUSE" button on the remote control.
(Display) L d 0 045 037
Measured value of CD current electricity
Measured value of DVD current electricity
(Automatically cancelled after five seconds.)
Apply the optical pickup tilt adjustment. (Refer to Procedure for Replacement.)
Use the tilt adjustment check function.
Initialize the player.

# 9.2. Cautions to Be Taken During Replacement of Optical Pickup and Spindle Motor Assembly

Before replacing the optical pickup and spindle motor assembly, check a usage time respectively. Follow the checking method described below.

| | Status and Key Function | Display |
|---|---|---|
| Checking CD laser usage time | With the unit stopped, press the "PLAY" button on the DVD player, the "FORWARD" button on VTR and the number "5" button on the remote controller unit at the same time. | $\frac{10}{xx}$XX YYYY<br>yyyy = total time is displayed with a four-digit number by the ten hours. |
| Checking DVD laser usage time | With the unit stopped, press the "PLAY" button on the DVD player, the "FORWARD" button on VTR and the number "5" button on the remote controller unit at the same time. | $\frac{10}{xx}$XX YYYY<br>xxxx = total time is displayed with a four-digit number by the ten hours. |
| Checking SP motor usage time | With the unit stopped, press the "PLAY" button on the DVD player, the "FORWARD" button on VTR and the number "6" button on the remote controller unit at the same time. | T2_xxxx<br>xxxx = total time is displayed with a four-digit number by the ten hours. |
| Resetting each usage time of DVD and CD lasers (simultaneous resetting) (Apply this operation before laser usage time checking mode is cancelled.) | While the unit stopped, press the "STOP" button on the DVD player, the "FORWARD" button on VTR and the number "5" button on the remote controller unit at the same time. | $\frac{10}{xx}$00 0000 |
| Resetting SP motor usage time (Apply this operation before SP motor usage time checking mode is cancelled.) | While the unit stopped, press the "STOP" button on the DVD player, the "FORWARD" button on VTR and the number "6" button on the remote controller unit at the same time. | T2_0000 |

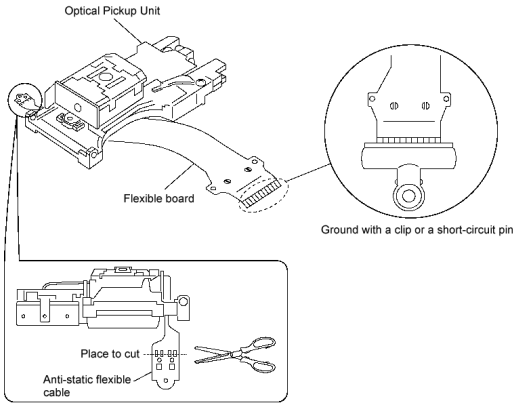
## 9.2.1. Cautions to be taken during replacement of optical pickup

Optical pickup could be damaged due to the static electricity discharged from human body. Wear proper protection gear against static electricity during optical pickup and its peripheral repair. (Refer to the section regarding protection against static electricity.)

1. Do not touch laser diode, actuator and their peripherals.
2. Do not check laser diode with a tester and such. (The tester will be destroyed.)
3. For short-circuiting or removing laser diode, the use of an anti-static soldering iron is recommended.
   (Recommended model: HAKKO ESD product)
4. Solder the land of the flexible cable in the optical pickup.

**Note:**

- If an anti-static soldering iron is not available, short-circuit the terminal surface of the flexible cable and then the land using a clip or equivalent device.
- For short-circuit of the above laser diode, remove soldering as instructed in this manual after completing repair.



# 10 Self-Diagnosis Function and Service Mode

## 10.1. Self-Diagnosis Function (VTR Section)

### 10.1.1. Sef-Diagnosis Display

**<Overview>**

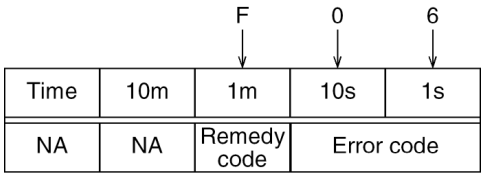
The details of failures detected in circuit or mechanism by the microcomputer will be automatically displayed on the FL display as the result of self diagnosis.

**<Setting>**

The details of a failure applicable to an error code are displayed on the minute, ten seconds, one second position of the FIP.

**<Display>**

**FL display example:**




**<List of Remedy Code>**

| Remedy code | Remedy |
|---|---|
| U | User manageable |
| H | Should be managed by distributor |
| F | Should be managed at servicing center |

**<List of Error Code>**

| Display | Meaning | Automatic display | Memory |
|---|---|---|---|
| U11 | Detection of head clogging-ups | O | O |
| U30 | Remote controller mode error | O | X |
| H01 | No initialization of cylinder due to no loading(Cylinder, driving circuit failure, etc.) | O | O |
| H02 | No capstan FG at load position(Capstan, driving circuit failure, etc.) | O | O |
| F03 | Mechanism locking not because of unloading, cassette up* Displayed when detected twice consecutively. | O | O |
| F04 | Mechanism locking due to unloading* Displayed when detected twice consecutively. | O | O |
| F05 | No S-reel pulse due to unloading(S-reel system, capstan system failure) | X | O |
| F06 | Mechanism locking due to cassette up | O | O |
| F07 | Recording circuit operation failure during REC operation | O | O |
| F08 | Recording circuit operation failure not during REC operation | O | O |
| F15 | No capstan FG when cassette is loaded(Capstan system, S-reel system failure) | X | O |
| H16 | Cylinder lock detected during normal rotation | X | O |
| H17 | S-reel lock detected during normal running | O | O |
| H18 | T-reel lock detected during normal running | O | O |
| H80 | EJECT mode when an error is detected | X | O |
| F2* | Error during PG automatic adjustment | O | O |

## 10.1.2. Service Mode

**<Service Mode and Service Data>**

| Number | Details | Meaning at Minute Position (Service Data 1) | Meaning of Second Position (Service Data 2) | Note |
|---|---|---|---|---|
| 0 | Service data | VCR mode (real time) | Processing number (real time) | |
| | | Deck mode | Treatment during mechanism transition Control number | |
| 1 | Service data | Starting/End terminal detect information | Reception key information | Displayed only when the reception key button is ON. |
| | | 00 : Detection of neither starting or end terminal 01 : Detecting starting terminal 02 : Detecting end terminal 03 : Detecting both starting and end terminals | When the unit key or remote controller unit is used, the reception code is displayed. | |
| 2 | Service data | Mechanical position (real time) | Motor command (real time) | Because the mechanical operation is available without a tape, this mode accepts: No starting/end terminal detection No reel lock detection No judgment of tape quality and no position detection |
| | | 0L : EJECT position 02 : DOWN positions 03 : R-REW positions 04 : LOAD positions 05 : REV positions 06 : PLAY positions 07 : POFF positions 08 : STOP positions 09 : STOP positions 0- : FFREW positions 0_ : Middle of positions | 0*, 2* : CYL off Cap off 1* : CYL off Cap on (fwd) 3* : CYL off Cap ON (rev) 8*, U* : CYL on Cap off 9* : CYL on Cap on (fwd) A* : CYL on Cap ON (rev) *0 : Moter off *1 : Loading *2 : Un Loading *3 : Break (Load + Unload) | |
| 3 | Self diagnosis history (1st time) | Error code of History 1 | Additional information 1 and 2 of History 1 | |
| 4 | Self diagnosis history (2nd time) | Error code of History 2 | Additional information 1 and 2 of History 2 | |
| 5 | Self diagnosis history (3rd time) | Error code of History 3 | Additional information 1 and 2 of History 3 | |
| 6 | Service data | Cylinder ON command | Cap motor ON/OFF and forward/reverse rotation command | Same as the details numbered as 5 and 6 of previous service mode. |
| 7 | Manual operation | Real timeMechanical position | Real timeMotor command | PLAY button ON: loading direction STOP button ON: Unloading direction |
| | | Same as the details of Service 2 | Same as the details of Service 2 | |

## 10.1.3. Service Mode Display

**<Overview>**

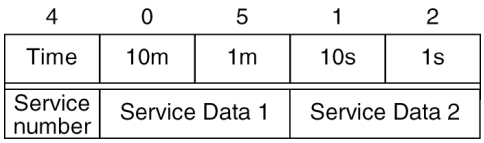
A part of the microcomputer internal information is displayed on the FL in order to ease servicing during sales.

**<Setting>**

Press and hold down the FF and EJECT buttons for at least three seconds to enter the service mode. As this operation is repeated, service number changes starting at 0 up to 7, and then counter (clock) is displayed.

**<Display>**

**FL display example:**




## 10.1.4. Self-Diagnosis History Memory Function

**<Memory Setting of Self-Diagnosis History>**

1. Memorizes the self-diagnosis result and the additional data at the moment when an error is detected.

2. History is numbered up to three. The latest error always appears first, shifting the old ones as two and three.
3. Other data that cannot be fit within three histories are discarded.
4. The same error is not memorized.

**<Resetting Self-Diagnosis History>**

Press and hold down the FF and EJECT keys at the same time at least 5 seconds to reset the data. (Be sure to apply this operation after repair.)

**<Display of Self-Diagnosis History>**

The self-diagnosis history and additional data will be displayed on the FL, using numbers 3 to 5 of the service mode.

**FL display example:**

| Time | 10m | 1m | 10s | 1s |
|---|---|---|---|---|
| Service number | Error Code | | Additional Data | |
| 3 | Error Code of history 1 | | Additional data 1 of history 1 | Additional data 2 of history 1 |
| 4 | Error Code of history 2 | | Additional data 1 of history 2 | Additional data 2 of history 2 |
| 5 | Error Code of history 3 | | Additional data 1 of history 3 | Additional data 2 of history 3 |

By selecting 3, 4 or 5 of the service mode, error code and additional data of history 1, history 2, and history 3 are displayed respectively.

When no error code is memorized, "-" will appear as error code and additional data.

## 10.1.5. Self-Diagnosis History Memory

**<Overview>**

The self-diagnosis history memory function stores up to three errors historically, which of each occurs consecutively, and also additional data such as deck mode and mechanism position along with error code for the purpose of speedy solution of a problem.

**<Error code and additional data>**

Following table shows additional data applicable to error code.

| Error code | Meaning | Additional data | | | |
|---|---|---|---|---|---|
| | | Data 1 | Data 2 | Data 3 | Data 4 |
| 01 | No initialization of cylinder due to no loading (Cylinder, driving circuit failure, etc.) | VCR mode | - | Tape position | None |
| 02 | No capstan FG at load position (Capstan, driving circuit, etc. failure) | VCR mode | - | Tape position | FG count |
| 03 | Mechanism locking not because of unloading, cassette up | VCR mode | Standby position | Tape position | LM information |
| 04 | Mechanism locking due to unloading | VCR mode | - | Tape position | LM information |
| 05 | No S-reel pulse due to unloading (S-reel system, capstan system failure) | VCR mode | Tape position | Tape position | LM information |
| 06 | Mechanism locking due to cassette up | VCR mode | Standby position | Tape position | LM information |
| 07 | Recording circuit operation failure during REC operation | VCR mode | - | Tape position | None |
| 08 | Recording circuit operation failure not during REC operation | VCR mode | - | Tape position | None |
| 11 | Detection of head clogging-ups | VCR mode | - | Tape position | None |
| 15 | No S-reel pulse when cassette is loaded (Capstan system, S-reel system failure) | VCR mode | S-reel pulse counting value | Tape position | None |
| 16 | Cylinder lock detected during normal rotation | VCR mode | Processing number | Tape position | None |

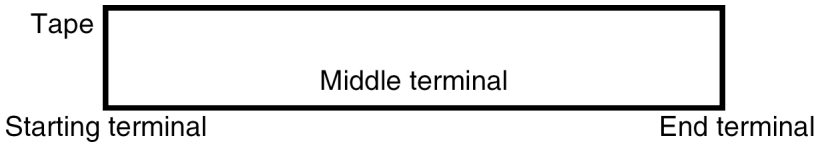
| | | | | | |
|---|---|---|---|---|---|
| 17 | S-reel lock detected during normal running | VCR mode | Processing number | Tape position | FG count |
| 18 | T-reel lock detected during normal running | VCR mode | Processing number | Tape position | FG count |
| 80 | EJECT mode when an error is detected | VCR mode | *1 | Tape position | None |
| 2* | Error during PG automatic adjustment | VCR mode | - | Tape position | None |

**<Meaning of Additional data, (Data 1), VCR mode)**

0 : STOP, 1 : EJECT, 2 : REW 3 : FF, 4 : REV, 5 : CUE, 6 : SLOW 7 : POWER OFF, 8 : PLAY, 9 : STILL, U : REC, A : REC PAUSE, - : ADUB, N : ADUB PAUSE, L : INSERT, NONE DISPLAYED : INSERT PAUSE

**<Meaning of Additional data, (Data 2), Tape position)**

| Type of tape | Criterion of tape position between starting and end terminals |
|---|---|
| T-90 or above (Thin Hub) | Between starting terminal: L and end terminal: 1 with fourteen levels of change |
| T-60 or below (Thick Hub) | Between starting terminal: U and end terminal: 5 with sic levels of change |




**<Data 2 display>**

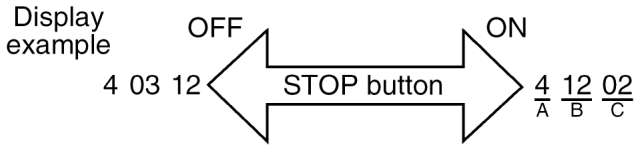
| | |
|---|---|
| Thin Hub | L n -- A u 9 8 7 6 5 4 3 2 1 |
| Thick Hub | U 9 8 7 6 5 |

***1 <Additional data, (Data 2)> (EJECT reason)**

| Data 2 | Reason |
|---|---|
| 1 | Loading completed when no tape is loaded. (spinning) |
| 2 | S-photo, S-reel, or Cap system failure during down short REW operation |
| 3 | Mechanism locking during loading |
| 4 | L both terminals detected when loading starts |

***Additional data 3 and 4**

While the self-diagnosis history is displayed, press the STOP button (on the unit or the remote controller unit) to switch between Additional data 3 and 4.




A : Service mode number
B : Additional data 3...mechanical processing transition NO
C : Additional data 4...LM (Loading Motor) information

4 12 02
(Meaning) : When EJECT button is pressed, the loading motor is turned on but a problem occurs during transition from REV through LOAD.

**<Additional data 3> (Mechanical process transition NO)**

| (EJECT) | (P ON) |
|---|---|
| 10 : PLAY→REV passing11 : REV passing12 : REV passing→LOAD (Capstan stop)13 : LOAD→DOWN14 : DOWN→EJECT15 : EJECT completed | None displayed: Power ON treatment |
| | |
| | (P OFF) |
| | 70 : PLAY→P OFF |
| (FF) | (REW) |
| U0 : PLAY→STOP FU1 : STOP F→FFU2 : FF initialization | A0 : PLAY→STOP FA1 : STOP F→REWA2 : REW initialization |
| (PLAY) | (STILL) |
| 20 : Cylinder initialization, phase drawing21 : Audio mute, W switch | 40 : Forward rotation, REC signal off41 : Speed 0, Capstan Off |
| (REC) | (STILL→PLAY) |
| 30 : Cylinder initialization, phase drawing31 : REC signal output | 48 : Tape forwarding |
| (CUE→PLAY) | (REV) |
| 4A : End terminal check, tape forwarding4- : PLAY check, tape forwarding | 80 : PLAY→P OFF81 : Rewind82 : P OFF→REV |
| (CUE) | |
| 49 : Double speed forwarding, remaining computation jump | |

**<Additional data 4> (LM information)**

By loading motor driving request

No change in mechanical position: 1 (loading motor OFF)

Some change in mechanical position: 2 (loading motor ON)

# 10.2. Self-Diagnosis Function (DVD Section)

## 10.2.1. Self-Diagnosis Display

**<Overview>**

The details of failures detected in circuit or mechanism by the microcomputer will be automatically displayed on the FL display as the result of self diagnosis.

**<Setting>**

The details of a failure applicable to an error code are displayed on the FL display.

**<Display>**

**FL display example: F 0 4**

**<List of Error Code>**

| Display | Type of error | Description |
|---|---|---|
| U 11 | Focus error | |
| H 01 | Tray loading error | |
| H 02 | Spindle servo error | Spindle servo, DSC, SP motor, CLV servo error |
| F 03 | Traverse servo error | |
| F 04 | Tracking servo error | |
| F 05 | Seek error | |
| F 06 | Power supply error | Power cannot be turned off due to communication error between panel computer and system computer. |

## 10.2.2. Error Code Display

While pressing and holding down the PLAY and OPEN keys on the DVD layer, press the number "0" in order to display the latest error code. (Automatically cancelled after five seconds.)

**<Error Code Display>**

| Section | Code | Meaning | Note |
|---|---|---|---|
| Disc code | F103 | Illegal Highlight Position | Possibility of illegal disc when highlight is displayed |

| Section | Code | Meaning | Note |
|---|---|---|---|
| Decoder related | F220 | Y level adjustment failure | Brightness signal level adjustment cannot be properly operated |
| | F221 | C level adjustment failure | Color signal level adjustment cannot be properly operated |
| II C error | F4FF | Compulsory initialization failure (time out) | |
| DSC related | F500 | DSC error | DSC stops due to servo failure. (Startup, focus failure, etc.) |
| | F501 | DSC not ready | Communication failure between DSC and system computer(No communication because DSC does not move) |
| | F502 | DSC time out failure | See F500. |
| | F503 | DSC communication failure | Communication failure (Result failure occurs after communication command is transmitted.) |
| | F504 | Data slice offset adjustment failure | Not in use. (FEP error) |
| | F505 | DSC Attention Error | See F500. |
| | F506 | Invalid media | Disc is placed upside down; TOC is unreadable or invalid disc is inserted. |
| ODC related | F600 | Control information unattainable due to demodulation error | Operation stops because navigation data cannot be obtained due to demodulation system failure. |
| | F601 | Unknown sector ID requested | Operation stops because access of illegal ID data is requested. |
| | F602 | LEAD-IN unattainable due to demodulation error | Unable to read LEAD IN data |
| | F603 | KEYDET unattainable due to demodulation error | Unable to obtain CSS data |
| | F610 | ODC failure | No permission of command issue |
| | F611 | 6626 QCODE don´t read ERROR | Unable to obtain seek address at CD system |
| | F612 | No CRC OK during a certain time of duration | Unable to obtain ID data at DVD system |
| | F630 | No response to KEY DET makeshift | (Internal use) |
| | F631 | CPPM KEY DET unavailable to FILE end terminal | CPPM fail system cannot be read due to scratch. |
| | F632 | CPPM KEY DET unavailable | Revoke or altered. |
| Microcomputer error | F700 | MBX overflow | When replying a message to Disc Manager. (operation continues) |
| | F701 | Message command incomplete | A message is issued before replying to Disc Manager. |
| | F702 | Message command changed | A message is issued before replying to Disc Manager. |
| | F710 | AD conversion at AN0 incomplete | Conversion cannot be complete within a designated time during check of AD conversion before Y/C automatic adjustment. |
| | F711 | AD conversion at AN1 incomplete | Conversion cannot be complete within a designated time during check of AD conversion before Y/C automatic adjustment. |
| | F712 | AD conversion at AN0 dispersed | Conversion result exceeds standards while a designated value is set during check of AD conversion before Y/C automatic adjustment. |
| | F713 | AD conversion at AN1 dispersed | Conversion result exceeds standards while a designated value is set during check of AD conversion before Y/C automatic adjustment. |
| | F720 | DA conversion at AN0 unchangeable | Conversion result exceeds standards while a designated value is set during check of AD conversion before Y/C automatic adjustment. |
| | F721 | DA conversion at AN1 unchangeable | Conversion result exceeds standards while a designated value is set during check of AD conversion before Y/C automatic adjustment. |
| | F880 | Unsuitable task number | When a message arrives from not existing task (error stops) |
| | F890 | A message is sent during AV task transmission | During transmission of a message to AV task (error stops) |
| | F891 | Unable to transmit a message to AV task | When a message starts transmission to AV task (error stops) |
| | F893 | FLASH ROM altered | |
| | F894 | EEPROM failure | |
| | F895 | PERR JMP MI SMUCH | Firm device incompatible (non-conformant destination value) |
| | F896 | PERR JMP NON | Firm device incompatible (non existing jumper) |
| | F897 | PERR NO INIT | Initialization incomplete |
| | F8A0 | Unsuitable message command | When a message starts transmission to AV task (error stops) |

# 10.3. Self-Diagnosis Function and Service Mode

**Improvement of Self-Diagnosis FunctionPrevious self-diagnosis function of DVD player has been improved as follows:**

| Existing type | New type | |
|---|---|---|
| UHF error display<br>Latest error memory function<br>n=1 | UHF error display<br>Latest error memory function<br>n=20 | Memory storage upgraded |
| Jitter/read error display | Jitter read error display<br>Focus driving value display | Displays current electricity level of focus driving |
| Laser current electricity display for use of DVD | Laser current electricity display for use of DVD and CD | |
| | ADSC internal RAM display | Displays servo learning value stored inside ADSC (servo controller) IC RAM |
| | Servo process display | Displays an initialization process assigned to each servo process number for the steps taken especially during initialization of player boot. |
| | Total usage time display<br>SP motor<br>Laser (DVD/CD) | Displays usage time of each SP motor and laser (DVD/CD). |

# 10.4. Mode Table

Following modes are available with combinations of the pressed buttons on the player and on the remote controller unit.

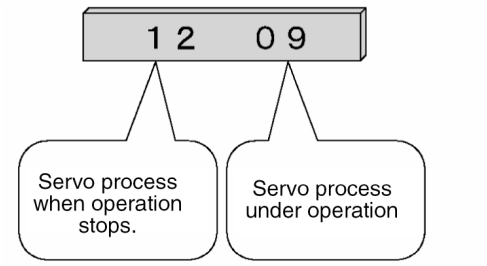
| Item | Operational Condition and Key Function | Details | Display | To Exit Mode |
|---|---|---|---|---|
| Jitter display | While the DVD player is stop, press and hold down the PLAY and OPEN/CLOSE buttons on the DVD player and the number "5" button on the remote controller unit. | Jitter display Measures and displays jitter value. Measurement is repeated every second. Read error counter starts at 0 at the mode setting, and increased by one as data read fails at target block. | J 081 001<br>Measured jitter value<br>Region number | Press the STOP or OPEN/CLOSE button. |
| Error code display | During ** mode, press and hold down the PLAY and OPEN/CLOSE buttons on the DVD player and the number "0" button on the remote controller unit. * By moving up and down the displayed cursor, panel computer changes history number and re-issues a command. | Error code display Displays the latest error code stored in EEPROM | * Refer to the section regarding error code display. | Automatically cancelled after five seconds. |
| Laser driving current electricity level writing | While no disc is loaded, press and hold down the PLAY and OPEN/CLOSE buttons on the DVD player and the PAUSE button on the remote controller unit. | Writes laser driving current electricity level. Stores each initialization value of DVD and CD in EEPROM. | L 040 034<br>d o<br>Measured DVD current electricity value<br>Measured CD current electricity value<br>The above example shows that the initial current electricity level is 40mA for DVD laser and 34mA for CD laser when laser is turned on. | Automatically cancelled after five seconds. |
| Measurement of DVD laser current electricity | While no disc is loaded, press and hold down the PLAY and OPEN/CLOSE buttons on the DVD player and the DISPLAY button on the remote controller unit. | Measurement of DVD laser current electricity Measures DVD laser current electricity and displays the result together with the initialization value stored in EEPROM. After measurement, DVD laser is lit till the power is turned off. | L 043 038<br>d d<br>Current electricity initialization value stored in EEPROM<br>Present current electricity<br>The above example shows that the current electricity initialization value is 43mA when laser is turned on. | Automatically cancelled after five seconds. |
| ADSC internal RAM display | During ** mode, press and hold down the PLAY and OPEN/CLOSE buttons on the DVD player and the RETURN" on the remote controller unit. | ADSC internal RAM display Reads and displays the RAM value inside ADSC. The address is renewed when the CLEAR key is pressed so that the values at eleven points appear. | A1 140 200<br>Address<br>RAM value at displayed address | Press the STOP or OPEN/CLOSE button. |

| Item | Operational Condition and Key Function | Details | Display | To Exit Mode |
|---|---|---|---|---|
| Servo process display | While no disc is inserted, press and hold down the PLAY button on the DVD player and the FORWARD button on VTR and the number "7" button on the remote controller unit. | Servo process display Displays the servo process from stop to access. | *Refer to the servo process flowchart. | Turn off the power. |
| Measurement of CD laser current electricity | While no disc is loaded, press and hold down the PLAY button on the DVD player, the FORWARD button on VTR and the DISPLAY button on the remote controller. | Measurement of CD laser current electricity Measures CD laser current electricity and displays the result together with the initialization value stored in EEPROM. After measurement, CD laser is lit till the power is turned off. | LD<br>C0 36 041<br>Present current electricity value<br>Current electricity initialization value stored in EEPROM | Automatically cancelled after five seconds. |
| Version display | While no disc is loaded, press the PLAY and OPEN/CLOSE buttons on the DVD player and the number "7" button on the remote controller unit. | Version display | 22<br>01 65 C 185<br>Generation<br>Type of device<br>Release number | Automatically cancelled after five seconds. |
| FL all lit | During ** mode, press the PLAY and OPEN/CLOSE buttons on the DVD player and the number "9" button on the remote controller unit. | FL all lit | Check that all FL are lit. | Turn off the power. |
| Dealers lock | When no disc is loaded, press the STOP button on the DVD player and the POWER button on the remote controller unit. | Dealers lockSwitches ON/OFF.During dealers lock mode, tray cannot be opened when the power is turned off. | "LOCKED" is displayed when the power is off and the tray is opened during dealers lock is activated. | Press the same buttons used for activation in the same manner. |
| User initialization | When no disc is loaded, press and hold down the PLAY and OPEN/CLOSE buttons on the DVD player and the REWIND button on VTR for at least three seconds. | User initializationThe user setting recovers the factory setting. | (INITIALIZED) | None |
| Region display | When no disc is loaded, press the PLAY and OPEN/CLOSE buttons on the DVD player and the number "6" button on the remote controller unit. | Region display | 2 N N 242<br>Operation computer jumper information<br>N : NTSC, 6 : PAL60<br>N : nonPAL, P : PAL<br>Read error counter value | Automatically cancelled after five seconds. |
| CD/DVD laser usage time check | When no disc is loaded, press the PLAY button on the DVD player, the FF button on VTR and the number "5" button on the remote controller unit. | CD/DVD laser usage time checkMeasures a time for CD and DVD respectively. | 10<br>00 016 028<br>CD laser time<br>DVD laser time | Automatically cancelled after five seconds. |
| CD/DVD laser usage time reset | When no disc is loaded, press the PLAY button on the DVD player, the FF button on VTR and the number "5" button on the remote controller unit. * Do it during showing the time of the Razer using. | CD/DVD laser usage time resetResets usage times of CD/DVD simultaneously. | 10<br>00 000 000 | Automatically cancelled after five seconds. |
| SP motor usage time check | When no disc is loaded, press the PLAY button on the DVD player, the FF button on VTR and the number "6" button on the remote controller unit. | Checks SP motor usage time. | T2 1234<br>SP motor usage time | Automatically cancelled after five seconds. |
| SP motor usage time reset | When no disc is loaded, press the STOP button on the DVD player, the FF button on VTR, and the number "6" button on the remote controller unit.* Press all the buttons while SP motor usage time is displayed. | Resets SP motor usage time. | T2 0000 | Automatically cancelled after five seconds. |

# 10.5. Servo Process Flowchart

"Display Method" When no disc is loaded, press the PLAY button on the DVD player, the FF button on VTR, and the number "7" button on the remote controller unit.

Display Details of Servo Process during Initialization




(Restrictions)
Not all the currently progressing process can be displayed due to processing time.

"To Exit"
Turn off the power.

| Initialization flow | Range applicable to servo process number | Treatment Item: Number | Treatment Item: Meaning |
|---|---|---|---|
| START | | | |
| Initialization setting Tray control | 00 | 00 | Individual initialization setting |
| TRV initialization movement | 01 | 01 | TRV initialization movement |
| Detection of disc loaded/unloaded | 02 ~ 08 | 02 | Initialization setting of FE system |
| | | 05 | Detection of LD ON HALF loaded/unloaded |
| | | 08 | Detection of CD LD ON loaded/unloaded |
| Detection of disc type | 09 ~ 0C | 09 | SPM initialization |
| Focus servo | 10 ~ 13 | 12 | Focus ON |
| | | 13 | FBAL adjustment |
| Tracking servo | 14 ~ 15 | 15 | Tracking ON |
| Gain learning | 17 | 17 | Gain adjustment of ADSC focus system |
| ID lead | 18 ~ 1A | 19 | Adjustment of DBAL/ equalizer etc. |
| | | 1A | ID lead |

## 10.6. Servo Process Display Mode

Each step can be monitored by a number assigned to each servo process during player initialization.Following table shows each process applicable to displayed numbers.

**Number Assigned to Servo Process**

| Processing Type | Processing Item | Details | Processing number |
|---|---|---|---|
| Initialization | Initialization | Operated after tray is loaded. (Transit to READY or PREPARE mode.) | 0 ~ 4F |
| | Secondary learning | Performs servo learning for L1 layer of DVD-DL and 1 single speed of CD-DA. | 50 ~ 7F |
| Re- initialization | Re-initialization | Each servo is turned on at READY mode by user. | 80 ~ 9F |
| Seek | Seek | Optical pickup is moved to a designated position on the disc. | A0 ~ BF |
| Recovery | Recovery | | |
| | (Error check) | Search during PLAY/SEEK mode | C0 ~ C4 |
| | (Action) | Error recovery according to attention error interruption sent from S-ODC. | C5 ~ C9 |
| | (Q-code read) | Reset and retry when Q-code cannot be read. | CA ~ CF |
| Stop | Stop | Disc operation completely stops as servo down according to user´s operation. | F0 ~ FF |

## 10.7. ADSC internal RAM display

Displays servo learning values of ADSC internal RAM as servo processor.Used for judging the quality of servo operation, disc, and OPU. Followings are commonly displayed addresses:

| Address | Meaning |
|---|---|
| 4B4 | Focus gain learning value of DVD-S, DVD-D (LO), CD and VCD |
| 4BC | Focus gain learning value of DVD-D (L1) |
| 4B6 | Focus balance learning value of DVD-S, DVD-D (LO), CD and VCD |
| 4BE | Focus balance learning value of DVD-D (L1) |
| 4B5 | Tracking gain learning value of DVD-S, DVD-D (LO), CD and VCD |
| 4BD | Tracking gain learning value of DVD-D (L1) |
| TB0 | Tracking balance learning value of DVD-S, DVD-D (LO), CD and VCD |
| TB1 | Tracking balance learning value of DVD-D (L1) |
| DBD | DSL offset learning value of DVD-S and DVD-D |
| DBC | DSL offset learning value of CD and VCD |
| FC0 | Equalizer FC value of DVD-S, DVD-D (LO), CD and VCD |
| BT0 | Equalizer BOOST value of DVD-S, DVD-D (LO), CD and VCD |
| FC1 | Equalizer FC value of DVD-D (L1) |
| BTI | Equalizer BOOST value of DVD-D (L1) |

## 10.8. Lock Function

This function prohibits removal of disc and some disc operations to prevent loss of disc at a shop during sales promotion or equivalent occasions. While this function is activated, the player displays "LOCKED" if any button is touched.

### 10.8.1. Setting

While pressing and holding down the "STOP" key on the unit, press the POWER button on the remote controller unit to activate. (The message, "LOCKED" appears when the function is activated.)

### 10.8.2. Exiting Lock Function

While the lock function is activated, press the buttons which are used to enter the mode in the same manner. (When the lock function is deactivated, the message, "UNLOCKED" appears.) (This function cannot be cancelled even when the power is turned off.)

## 10.9. Cautions To Be Taken During Servicing

### 10.9.1. Recovery Process after Repair of DVD Player

When DVD Module 2 P.C.B and/or FLASH ROM, EEPROM, etc. inside DVD Module 2 P.C.B, apply the recovery operation in order to optimize the new drive. Use the following disc so that the operation starts automatically.

Recovery disc (product number=RFKZD03R005)

**Note:**

Previously required initialization after repair of DVD player is no longer necessary. After completing the recovery process, the user´s setting is replaced with factory setting like user initialization. Therefore, record the user´s setting before repair in order to restore it after applying the recovery process.

### 10.9.2. DVD Player Firmware Version Upgrade Process

Firmware of DVD player may upgrade to conform to improvement of its performance and quality including operational range, playability of non-standardized discs, etc. The version upgrade disc contains the recovery function, and the recovery disc is not necessary.

**Note:**

Version upgrade process cannot be complete if the AC power is cut off due to power failure and other occasions during the process. If this occurs, replace FLASH ROM and restart version upgrade. Version upgrade disc number is informed when ordered.

## 10.10. Operation after Completion of Repair

Follow the steps described below after completion of repair.

### 10.10.1. Steps

While the power is turned on:

1. Close the tray using the OPEN/CLOSE button.
2. Turn off the power using the POWER button.
3. Unplug the power outlet.

### 10.10.2. Precaution Note (Important)

Do not unplug the power outlet while the tray is open, and do not close the tray manually.

# 11 CHECKING POINTS FOR SYS COM TIMER MY-COM (IC6001) (VIDEO)

## 11.1. Points to check when replacing

When the replacing the Sys Com Timer My-Com (IC6001), surely check the contents of data of a microcomputer before replacing. When the Program Navi is "ON", take backup before replacing and set the initial value. *It also carries out at the time of replacing the P.C.B

(The procedure)

1. Before replacing IC6001, please record and keep the channel of already set-up TV broadcast. The backup of the program navi is also required since IC6001 already stores the program navi data. Please surely take the backup when the navi data is "ON".
   *The procedure of checking the program navi data without a cassette.
   a. Press both "EJECT" and "FF" buttons in the same time for 3 seconds and start the Service Mode.
   b. Push the button of program navi on the remote controller for 5 seconds.
   c. The program navi data is shown on the monitor.
   d.
2. After replacing IC6001, switch on the power supply of the VIDEO.
3. Short out TL6002 and TL6004 on the main P.C.B by short jumper.
4. Initialise the Sys Com Timer My-Com as below.
5. After that, short out the TL7501 and TL7502 on the main P.C.B. by short jumper twice to make the factory setting. (Unless carrying out the Factory Setting, the indication of the line-in doesn´t appear on the FIP panel).
6. After carrying out the procedure 1. to 5. as above please adjust the PG shifter.

## 11.2. Initial setting when replacing My-com.

1. Initial setting is an important function in order to guarantee as a product correctly. Unless it inputs the number according to the model, it cannot operate correctly.
2. Once the initial-setting value set up, even if a microcomputer (IC6001) is reset, it has memorized.
3. Be sure to set the initial-setting value when replacing the main P.C.B. with a microcomputer (IC6001).
4. The RAM inside of the microcomputer (IC6001) stores the PG self-adjustment. Be sure to do the PG self-adjustment when the Sys Com Timer My-Com, the P.C.B. with microcomputer, and cylinder unit are replaced.

## 11.3. Initial figure (#) setting procedure

① Set the service mode No: 2 by setting service mode.

Push EJECT button and FF button in the same time → set the service mode No: 2

DISPLAY
2 00 00

② Set the Initial setting Input Mode.

Push EJECT button for more than 3 seconds → set the initial setting Input Mode

DISPLAY
2 00

③ Set the Adjustment No: 2.

Push the channel UP Λ button twice → set the Adjustment No: 2

DISPLAY
2 2 00

④ Set the Initial-Setting Value Mode.

Push the Power Supply button → set the Initial-Setting Valume Mode

DISPLAY ...figures of the replaced
00 30 micro computer
(number)

⑤ Set the Initial-Setting Value Mode by these button.

| | |
|---|---|
| REW button | No, of the fourth digit |
| PLAY button | No, of the third digit |
| STOP button | No, of the second digit |
| FF button | No, of the first digit |

By using these buttons
Set the numbers
2256 on the display

DISPLAY
2256
2010

⑥ Finish the Initial setting.

Push the Power Supply button → Finish the Initial-Settinge

DISPLAY
2 2 00

⑦ Clear the Service Mode.

Push the EJECT button and then FF button in order. → Clear the Service Mode
Set the Normal Mode

DISPLAY
00 : 00 . ...CLOCK DISPLAY

**Caution:**

When using the service mode, please be sure to plug in and plugout once (for resetting) after clearing the service mode and setting the normal mode.

# 12 Adjustment Procedure (DVD Section)

## 12.1. Required Tools and Equipment

| Purpose of Use | Tools/Equipment | Model/Product Number |
|---|---|---|
| Tilt adjustment | DVD test disc | DVDT-S15 or DVDT-S01 |
| | TORX screw driver (T6) | Available on sales route. (T6) or RFKZ0185 |
| Others | Screw lock | RZZ0L01 |
| | Grease | JGS0091 JGS0092 |
| Checking | CD test disc | PVCD-K06 and any commercially available disc |
| | VCD test disc | PVCD-K06 and any commercially available disc |
| | Recovery disc | RFKZD03R005 |

## 12.2. Necessity of Adjustment

### 12.2.1. Necessity of Optical Adjustment

・Before starting optical system adjustment, be sure to wear proper protection gear against static electricity.

・Optical adjustment (optical pickup tilt adjustment) is required after following parts are replaced:

1. Optical pickup
2. Spindle motor assembly
3. Optical pickup peripherals such as a rail, etc.

**Note:**

Optical adjustment is not necessary after replacement of other parts inside traverse, however, may require when picture deterioration is detected. Optical adjustment cannot be applied to the inside of optical pickup. When a traverse unit is replaced, the adjustment is not necessary.

### 12.2.2. Necessity of Electrical Adjustment

・Follow the procedure for adjustment.

## 12.3. Storing and Handling Test Discs

・Surface precision is vital for DVD test discs. Be sure to store and handle them carefully.

1. Do not leave the discs uncovered on the work desk or other places after use.
2. Handle the discs carefully to prevent scratches. Put each disc in its case and place it in the standing position. Store the discs in a cool place and avoid direct sunlight or air conditioner.
3. Accurate adjustment cannot be expected with a disc warped against a flat surface. Obtain a new test disc for optical adjustment.
4. If a warped disc is used, adjustment would result incorrectly, and other discs could not be used.

## 12.4. Optical Adjustment (Optical Pickup Tilt Adjustment)

| Measurement point | Adjustment point | Mode | Disc |
|---|---|---|---|
| | Tangential adjustment screw<br>Tilt adjustment screw | T1 (inner track) replay<br>T43 (outer track) replay | DVDT-S15 or DVDT-S01 |
| Measuring equipment | | Adjustment value | |
| None (LCD display of the player is used.) | | Adjust that jitter value becomes minimum. | |

### 12.4.1. Optical Adjustment (Optical Pickup Tilt Adjustment)

1. While the player is stopped and no disc is inserted, select the DVD function. Press and hold down the ■ button on the player and the number button, “5” on the remote controller unit.
2. Check that “J_xxx_yyy_zz” is appearing on the display.

**For your information:**

The values, “yyy” and “zz” are not associated to jitter value.
“yyy” indicates the frequency of error occurrence.
“zz” indicates the focus drive value.

**Note:**

Jitter value appears on the display.

3. Replay T01 (inner track) of the test disc.
4. Adjust till the jitter value becomes minimum, using a tangential adjustment screw. <Fig. 12-1>

5. Replay T43 (outer track) of the test disc.
6. Adjust till the jitter value becomes minimum, using a tilt adjustment screw 1. <Fig. 12-1>
7. Replay T43 (outer track ) of the test disc.
8. Adjust till the jitter value becomes minimum, using a tilt adjustment screw 2.<Fig. 12-1>
9. Adjust till the jitter value becomes, using the tilt adjustment screws 1 and 2 alternatively.

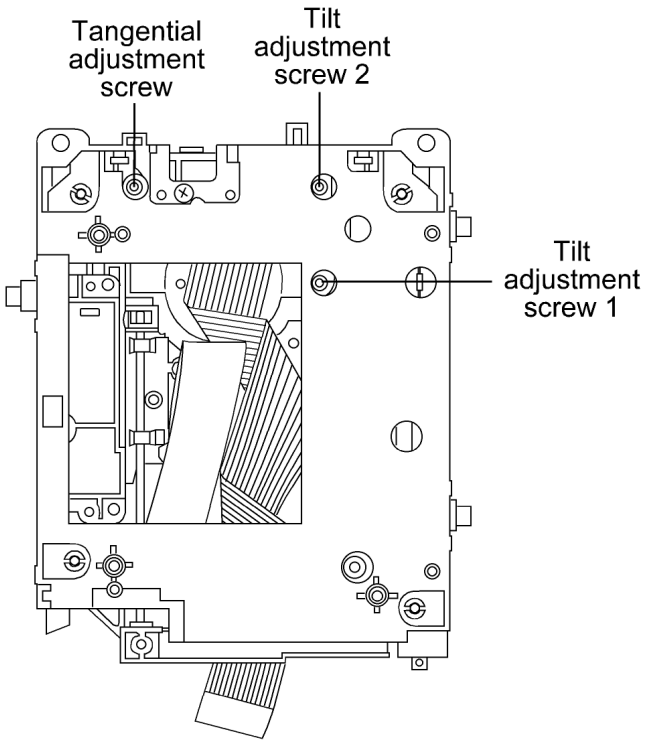
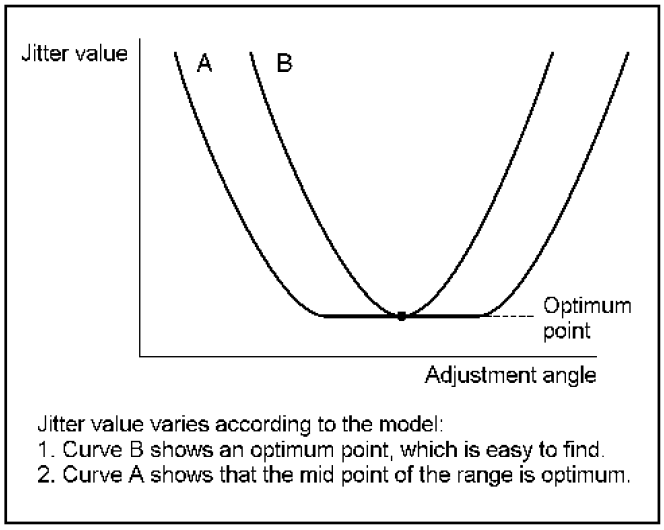



Fig. 12-1

## 12.4.2. Tips

1. Apply the tangential adjustment first and then the tilt adjustment.
2. Repeat the adjustment a couple of times to find the optimum point.
3. Complete with the tilt adjustment.


Jitter value
A
B
Optimum point
Adjustment angle
Jitter value varies according to the model:
1. Curve B shows an optimum point, which is easy to find.
2. Curve A shows that the mid point of the range is optimum.

## 12.4.3. Check After Adjustment

Replay test discs or other commercial discs in order to confirm that no picture deterioration or sound skipping is detected in the inner, middle, and outer tracks. After this, fasten each adjustment screw securely using a screw lock.

## 12.4.4. Procedure for Screw Lock

1. After adjustment, remove the top cover, clamper base, disc tray and then traverse unit.

2. Place the traverse unit upside down, and fasten the adjustment screws with a screw lock. <Fig. 12.2>
3. After fastening the screws, assemble in order of the traverse unit, disc tray, clamper base, and then top cover.

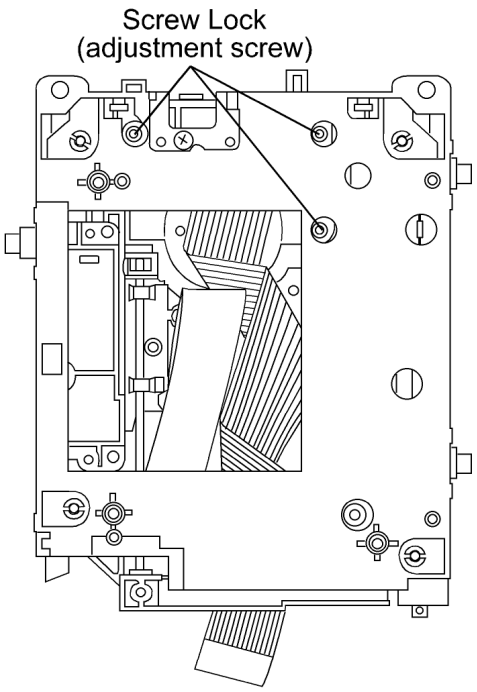
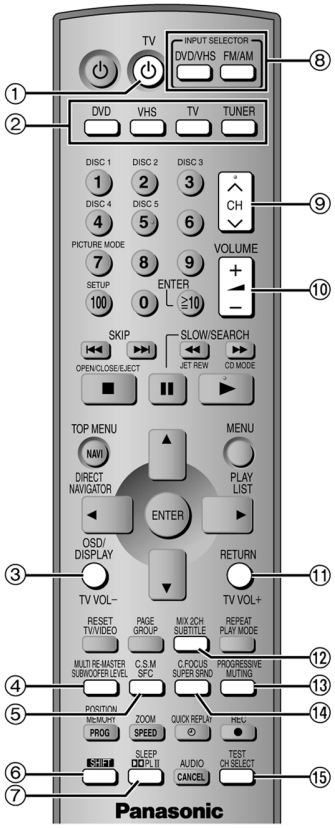



Fig. 12-2

# 13 Operation Procedure

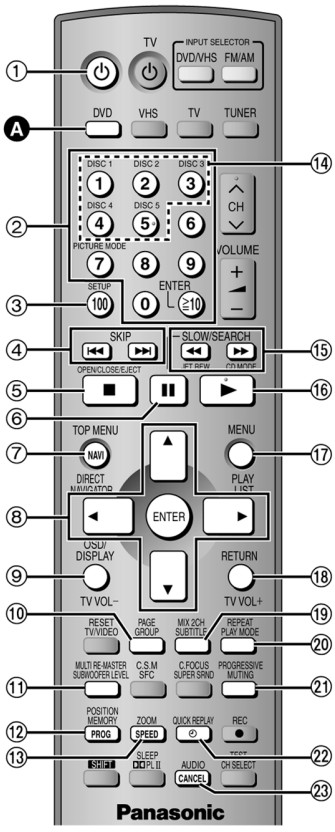
● If SHIFT appears after the button name the function will not work unless you use with [SHIFT] button. Make sure to press [SHIFT] and the button.

## Remote control—common buttons




① **TV Power button [⏻TV]**
② **Remote control mode selector button [DVD] [VHS] [TV] [TUNER]**
Changes the remote control mode. The button lights once pressed.
The selected mode is held in memory until you press another mode selector button.
The mode selector button lights each time you press an operational control button showing which mode is in use.
③ **TV volume down button [TV VOL−]**
④ **Bass adjust button [SUBWOOFER LEVEL]**
⑤ **Sound field control button [SFC]**
**Custom sound memory button [C.S.M]** SHIFT
⑥ **Shift button [SHIFT]**
To use the functions labeled in orange, press the button while pressing [SHIFT].
⑦ **Dolby Pro Logic II/Dolby Pro Logic button [PLII]**
**Sleep timer button [SLEEP]** SHIFT
⑧ **Main unit selector button**
**DVD/VHS source button [DVD/VHS]**
Switch the source on the main unit between DVD and VHS.
**Tuner/band button [FM/AM]**
Switch the source on the main unit to tuner and change the band.
⑨ **TV channel buttons [∧ ∨ CH]**
⑩ **Volume buttons [+ − VOLUME]**
Volume may be lower when playing DVD-Video than when playing other discs or during television broadcasts. Reduce the volume before playing other sources or returning to the television so volume doesn't increase suddenly.
⑪ **TV volume up button [TV VOL+]**
⑫ **Down-mix button [MIX 2CH]** SHIFT
⑬ **Muting button [MUTING]**
⑭ **Super surround button [SUPER SRND]**
**Center focus button [C.FOCUS]** SHIFT
⑮ **Speaker channel button [CH SELECT]**
**Test signal button [TEST]** SHIFT

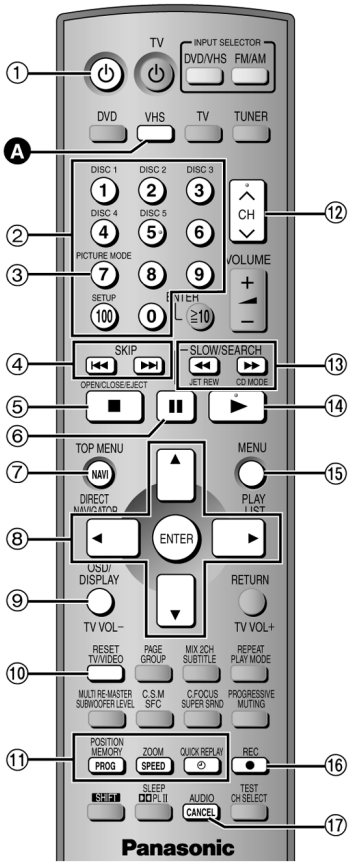
## Remote control—DVD operation




Ⓐ **DVD remote control mode button [DVD]**
Switch the remote control mode to DVD. Make sure you press before doing DVD operations. When in DVD mode, the [DVD] button lights each time you press one of the DVD operation buttons indicated below.
① **Power button [⏻]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
② **Numbered buttons [1–9, 0, ≧10/ENTER]**
③ **DVD SETUP menu button [SETUP]** SHIFT
④ **Skip buttons [⏮, ⏭ SKIP]**
⑤ **Stop button [■]**
**Open/close button [OPEN/CLOSE/EJECT]** SHIFT
⑥ **Pause button [❚❚]**
⑦ **Top menu button [TOP MENU]**
**Direct navigator button [DIRECT NAVIGATOR]**
⑧ **Cursor buttons [▲ ▼ ◄ ►]/Enter button [ENTER]**
⑨ **On-screen menu button [OSD/DISPLAY]**
⑩ **Group button [GROUP]**
**Still picture select button [PAGE]** SHIFT
⑪ **Multi re-master button [MULTI RE-MASTER]** SHIFT
⑫ **Position memory button [POSITION MEMORY]**
⑬ **Zoom button [ZOOM]**
⑭ **Disc buttons [DISC1]–[DISC5]** SHIFT
⑮ **Slow/search buttons [◄◄ ►► SLOW/SEARCH]**
**CD mode button [►► CD MODE]** SHIFT
⑯ **Play button [►]**
⑰ **Menu button [MENU]**
**Play list button [PLAY LIST]**
⑱ **Return button [RETURN]**
⑲ **Subtitle button [SUBTITLE]**
⑳ **Play mode button [PLAY MODE]**
**Repeat mode button [REPEAT]** SHIFT
㉑ **Progressive output button [PROGRESSIVE]** SHIFT
㉒ **Quick replay button [QUICK REPLAY]**
㉓ **Cancel button [CANCEL]**
**Soundtrack button [AUDIO]** SHIFT

● If SHIFT appears after the button name the function will not work unless you use with [SHIFT] button. Make sure to press [SHIFT] and the button.

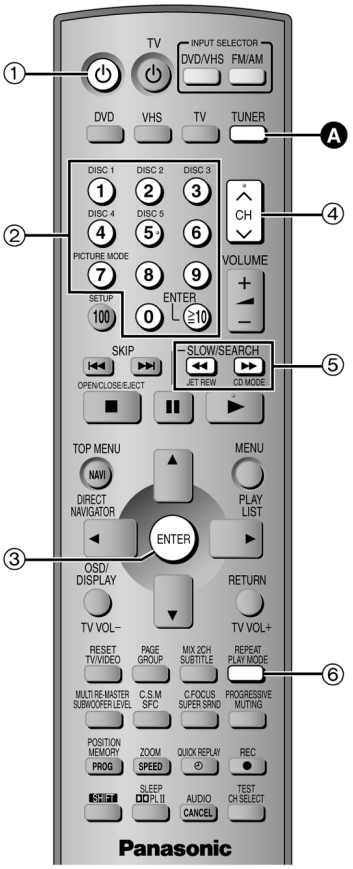
## Remote control—VHS operation




**Ⓐ VHS remote control mode button [VHS]**
Switch the remote control mode to VHS. Make sure you press before doing VHS operations. When in VHS mode, the [VHS] button lights each time you press one of the VHS operation buttons indicated below.

① **Power button [⏻]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
② **Numbered buttons [1–9, 100, 0]**
③ **Picture mode button [PICTURE MODE]** SHIFT
④ **Index search button [⏮ ⏭ SKIP]**
⑤ **Stop button [■]**
**Tape eject button [OPEN/CLOSE/EJECT]** SHIFT
⑥ **Pause button [❚❚]**
⑦ **Jet navigator button [NAVI]**
⑧ **Cursor buttons [▲ ▼ ◄ ►]/Enter button [ENTER]**
⑨ **On-screen display button [OSD/DISPLAY]**
⑩ **TV/Video button [TV/VIDEO]**
**Tape counter reset button [RESET]** SHIFT
⑪ **Timer recording buttons**
**Timer programming button [PROG]**
**Tape speed button [SPEED]**
**Timer program standby button [🕘]**
⑫ **Channel, tracking, and vertical hold buttons [∧ ∨ CH]**
⑬ **Fast-forward/rewind button [◄◄ ►► SLOW/SEARCH].**
**Jet rewind button [◄◄ JET REW]** SHIFT
⑭ **Play button [►]**
**Press and hold for five seconds to start repeat play**
⑮ **Menu button [MENU]**
⑯ **Recording button [● REC]** SHIFT
⑰ **Cancel button [CANCEL]**
**Audio button [AUDIO]** SHIFT

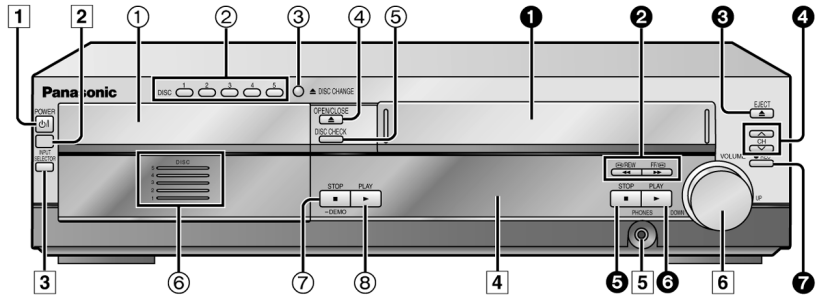
## Remote control—TUNER operation




**Ⓐ TUNER remote control mode button [TUNER]**
Switch the remote control mode to TUNER. Make sure you press before doing TUNER operations. When in TUNER mode, the [TUNER] button lights each time you press one of the TUNER operation buttons indicated below.

① **Power button [⏻]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
② **Numbered buttons [1–9, 0, ≧10/ENTER]**
③ **Enter button [ENTER]**
④ **Channel buttons [∧ ∨ CH]**
⑤ **Tuning buttons [◄◄ ►►]**
⑥ **FM mode button [PLAY MODE]**

## Main unit and subwoofer



### ■ Common buttons

**1 Power button [⏻/I POWER]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

**2 Remote control signal sensor**

**3 Source selector button [INPUT SELECTOR]**
VHS→DVD/CD→FM→AM

**4 Display**

**5 Headphone terminal [PHONES]**

**6 Volume dial [VOLUME DOWN, UP]**

### ■ DVD section

**① Drawer**

**② Disc buttons [DISC1–5]**

**③ Disc change button [▲ DISC CHANGE]**

**④ Drawer open/close button [▲ OPEN/CLOSE]**

**⑤ Disc check button [DISC CHECK]**

**⑥ Disc indicators**

**⑦ Stop button [■ STOP]**
**Demo button [–DEMO]**

**⑧ Play button [► PLAY]**

### ■ VHS section

**❶ Tape slot**

**❷ Fast-forward and rewind buttons [◄◄ (◄◄)/REW] [►► FF/(►►)]**

**❸ Tape eject button [▲ EJECT]**

**❹ Channel buttons [∧ CH] [∨ CH]**

**❺ Stop button [■ STOP]**

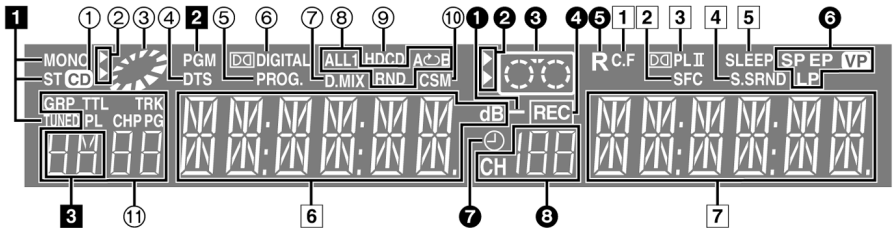
**❻ Play button [► PLAY]**

**❼ Recording button [● REC]**

### ■ Subwoofer

**1 AC supply indicator [AC IN]**
This indicator lights when the subwoofer is connected to a household AC outlet.

## Main unit display




### ■ Common display

**1 Center Focus indicator**

**2 Sound Field Control indicator**

**3 Dolby Pro Logic II/Dolby Pro Logic indicator**

**4 Super Surround indicator**

**5 SLEEP timer indicator**

**6 Main display (Orange)**
Disc play elapsed time, program recording end time, volume, TUNER frequency/channel display, various messages, etc.

**7 Main display (Green)**
Time display, video play/record elapsed time, program recording start time, various messages, etc.

### ■ DVD operation

**① CD mode indicator**
Lights when CD mode is on.

**② DVD selector indicator**
Lights when DVD is selected.

**③ Operation status of DVD section**
- Lights when a disc is inserted.
- Displays play status graphically.
  Rotating: playing
  Stopped: paused

**④ DTS indicator**

**⑤ Progressive video indicator**

**⑥ Dolby Digital indicator**

**⑦ Down mix indicator**

**⑧ Play sequence indicator**
**ALL:** During all group or all disc random play
**RND:** During random play
**1 RND:** During one disc random play
(◄◄) **:** During repeat
**A** (◄◄) **B:** During A-B repeat

**⑨ HDCD indicator**

**⑩ Custom Sound Memory indicator**

**⑪ Group/Play list/Track/Title/Chapter/Program number display**

### ■ VHS operation

**❶ VHS playback indicator**
Lights when a video cassette is playing.

**❷ VHS selector indicator**
Lights when the selector is in VHS mode.

**❸ Operation status of VHS section**
- Lights when a video cassette is inserted.
- Flashes when recording or timer recording is attempted with no video cassette inserted.
- Displays play status graphically.
  Rotating: playing
  Stopped: paused

**❹ Recording indicator**

**❺ Repeat playback indicator**

**❻ Tape speed indicator**

**❼ Timer program recording indicator**

**❽ Channel display**

### ■ Tuner operation

**1 Radio broadcast display**
**MONO**: Forced monaural
**ST**: Stereo
**TUNED**: Receiving radio signal

**2 Preset indicator**

**3 Band display**

# 14 Disc information

| Disc | Logo | Indication in these operating instructions | Remarks | |
|---|---|---|---|---|
| DVD-RAM | DVD RAM RAM4.7 | RAM | Recorded using Version 1.1 of the Video Recording Format (a unified video recording standard). | ● Recorded with DVD video recorders, DVD video cameras, personal computers, etc.<br>● Remove discs from their cartridges before use. |
| | | JPEG | Recorded using the DCF (Design rule for Camera File system) standard. | ● Recorded with Panasonic DVD-Video recorders<br>● To play JPEG files, select “Play as Data Disc” in Other Menu |
| DVD-Audio | DVD AUDIO | DVD-A | — | |
| | | DVD-V | Some DVD-Audio discs contain DVD-Video content.<br>To play DVD-Video content, select “Play as DVD-Video” in Other Menu | |
| DVD-Video | DVD VIDEO DVD VIDEO | DVD-V | — | |
| DVD-R | DVD R R4.7 | | Panasonic DVD-R recorded and finalized※ on a Panasonic DVD-Video recorders or DVD-Video cameras are played as DVD-Video on this unit. | |
| Video CD | COMPACT disc DIGITAL VIDEO | VCD | — | |
| SVCD | COMPACT disc SUPER VIDEO | | Conforming to IEC62107 | |
| CD | COMPACT disc DIGITAL AUDIO COMPACT disc DIGITAL AUDIO TEXT | CD | This unit is compatible with HDCD.<br>HDCD-encoded CDs sound better because they are encoded with 20 bits, as compared with 16 bits for all other CDs.<br>● During HDCD play, “HDCD” lights on the unit’s display. | |
| CD-R<br>CD-RW | — | WMA<br>MP3<br>JPEG<br>CD<br>VCD | ● This unit can play CD-R/RW (audio recording disc) recorded with the formats on the left. Close the sessions or finalize※ the disc after recording.<br>● **HighMAT discs**<br>WMA, MP3 or JPEG files only.<br>To play without using the HighMAT function, select “Play as HighMAT” in Other Menu. | |

※A process that allows play on compatible equipment.

● It may not be possible to play the above discs in all cases due to the type of disc or condition of the recording.

## ■ Discs that cannot be played

PAL discs (except DVD-Audio), DVD-ROM, CD-ROM, CDV, CD-G, DVD+R, +RW, DVD-RW, SACD, Divx Video Discs and Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6-GB and 5.2-GB DVD-RAM, and “Chaoji VCD” available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

## ■ Audio format of DVDs

This unit automatically recognizes and decodes with these symbols.

DOLBY DIGITAL

DIGITAL dts SURROUND

## ■ To prevent damage

Do not;

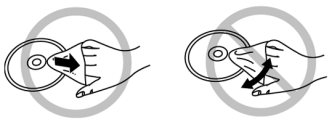
● load more than one disc per tray.

● close the drawer by hand.

## ■ To clean discs

DVD-A DVD-V VCD CD

Wipe with a damp cloth and then wipe dry.



RAM DVD-R

● Clean with an optional DVD-RAM/PD disc cleaner (LF-K200DCA1, where available).

● Never use cloths or cleaners for CDs etc.

## ■ Handling precautions

● Do not attach labels or stickers to discs (This may cause disc warping, rendering it unusable).

● Do not write on the label side with a ball-point pen or other writing instrument.

● Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.

● Do not use scratch-proof protectors or covers.

● Do not use the following discs:

–Discs with exposed adhesive from removed stickers or labels (rented discs etc).

–Discs that are badly warped or cracked.

–Irregularly shaped discs, such as heart shapes.

HIGH MAT AUDIO•IMAGE

HighMAT™ and the HighMAT logo are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

HDCD®, HDCD®, High Definition Compatible Digital® and Pacific Microsonics™ are either registered trademarks or trademarks of Pacific Microsonics, Inc. in the United States and/or other countries.

HDCD system manufactured under license from Pacific Microsonics, Inc. This product is covered by one or more of the following: In the USA : 5,479,168, 5,638,074, 5,640,161, 5,808,574, 5,838,274, 5,854,600, 5,864,311, 5,872,531, and in Australia: 669114, with other patents pending.

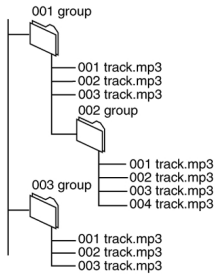
**Tips for making WMA/MP3 and JPEG discs (For CD-R/CD-RW)**

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

**Naming folders and files**

At the time of recording, prefix folder and file names with 3-digit numbers in the order you want to play them (this may not work at times).
Files must have the extension:
".WMA" or ".wma"
".MP3" or ".mp3"
".JPG", ".jpg", ".JPEG" or ".jpeg"

**e.g.** MP3




WMA

- You cannot play WMA files that are copy protected.

MP3

- This unit is not compatible with ID3 tags.
- Compatible sampling rate: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1 and 48 kHz.

JPEG

- To view JPEG files on this unit:
  – Take them on a digital camera that meets the DCF Standard (Design rule for Camera File system) Version 1.0. Some digital cameras have functions that are not supported by the DCF Standard Version 1.0 like automatic picture rotation which may render a picture unviewable.
  – Do not alter the files in any way or save them under a different name.
- This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g. TIFF) or play associated sound.

Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

Manufactured under license from Dolby Laboratories.
"Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

"DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.

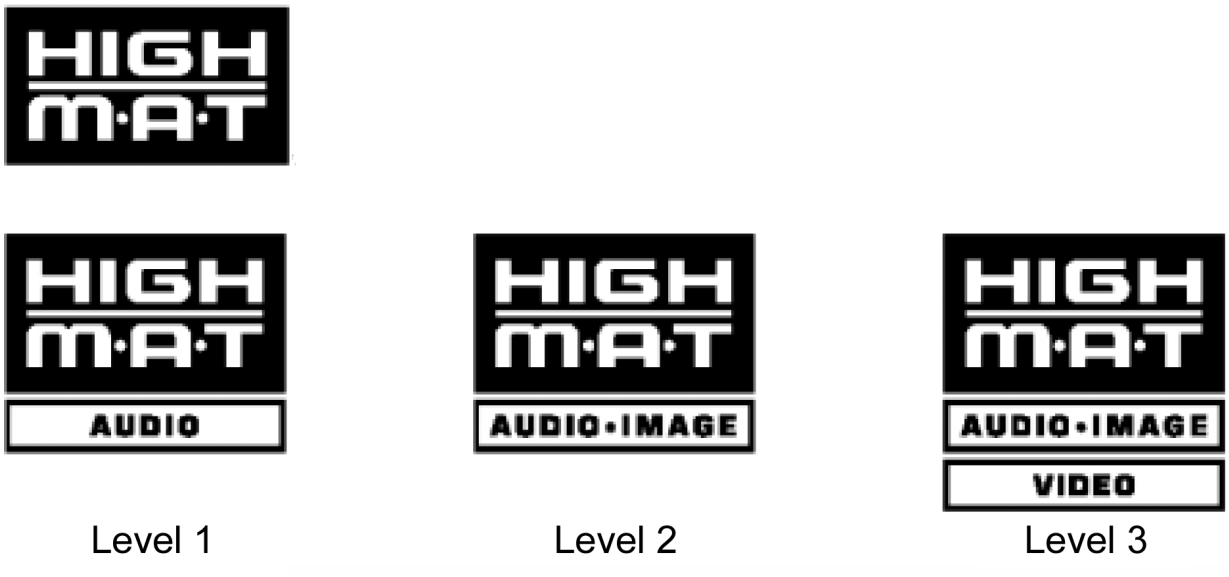
Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, and 4,819,098, licensed for limited viewing uses only.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

# 15 About HighMAT

## 15.1. What is HighMAT?

This word combines the abbreviations of Matsushita Electric Industrial Co., Ltd. and High Performance Media Access Technology, and is a trademark of Microsoft Corporation. The products with the HighMAT logo shown below are made according to the HighMAT standard.




HighMat is a format that allows users to save digital contents such as photographs, audio and images on a CD. This gives consistency in the way of reading data when general consumer products (such as DVD players) and PCs are used, and thus, it is easy to operate for the user.

## 15.2. Why use HighMAT?

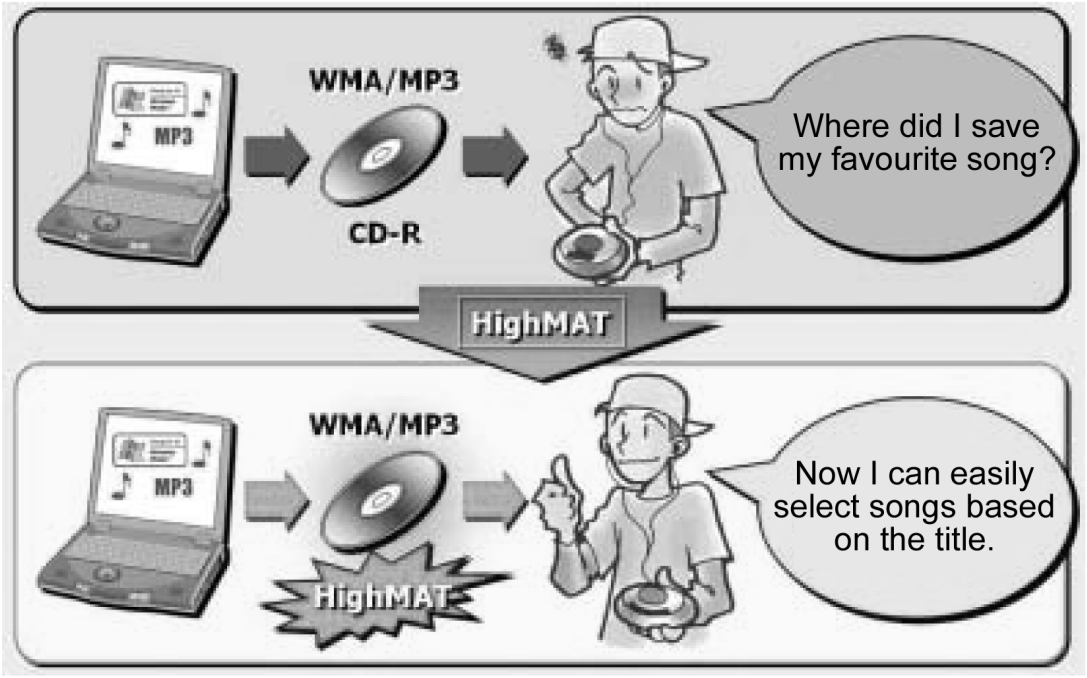
Up to now, there was no harmonized standard from playing digital content stored in CD-ROM formats (including CD-R) on consumer products like DVD players. Therefore, we used to have problems such as follow:

- There was no common play list or attached information on contents, which is called metadata.
- The data compression method differed according to the equipment.
- As the number of CD-ROMs recorded increased retrieved the contents became more difficult.
- Because display and operation methods were different depending on the equipment, the play order of the content on the same disc could change.

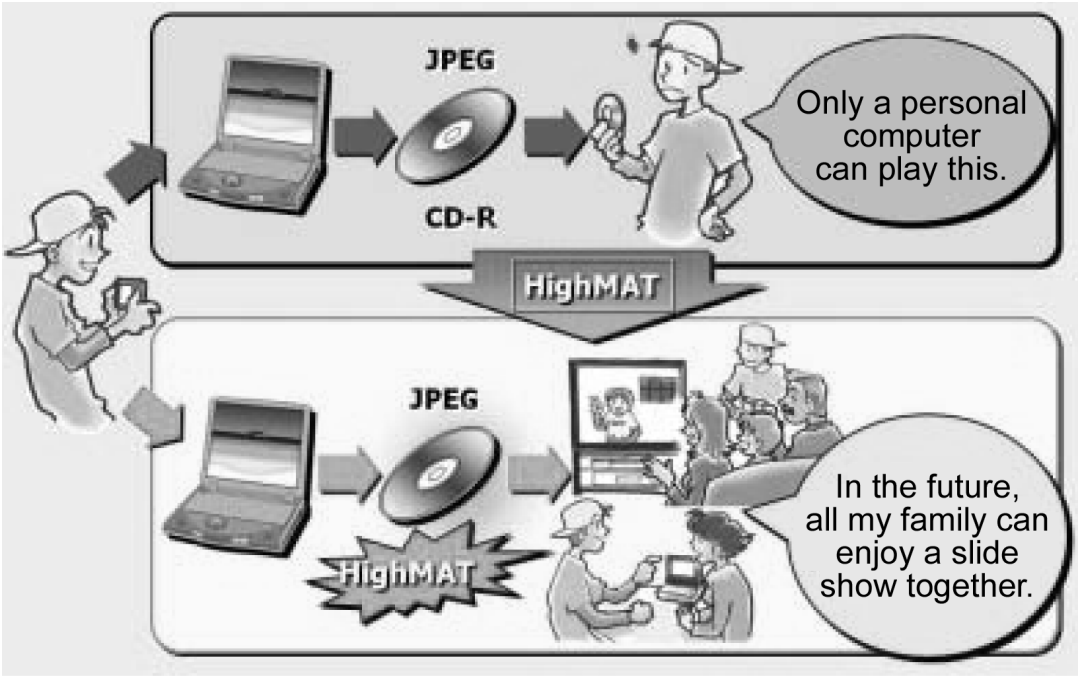
## 15.3. The advantages of using HighMAT

Applying the HighMAT standard will solve the following problems and will improve usability.

- It will create a common user interface for both PC and consumer products.



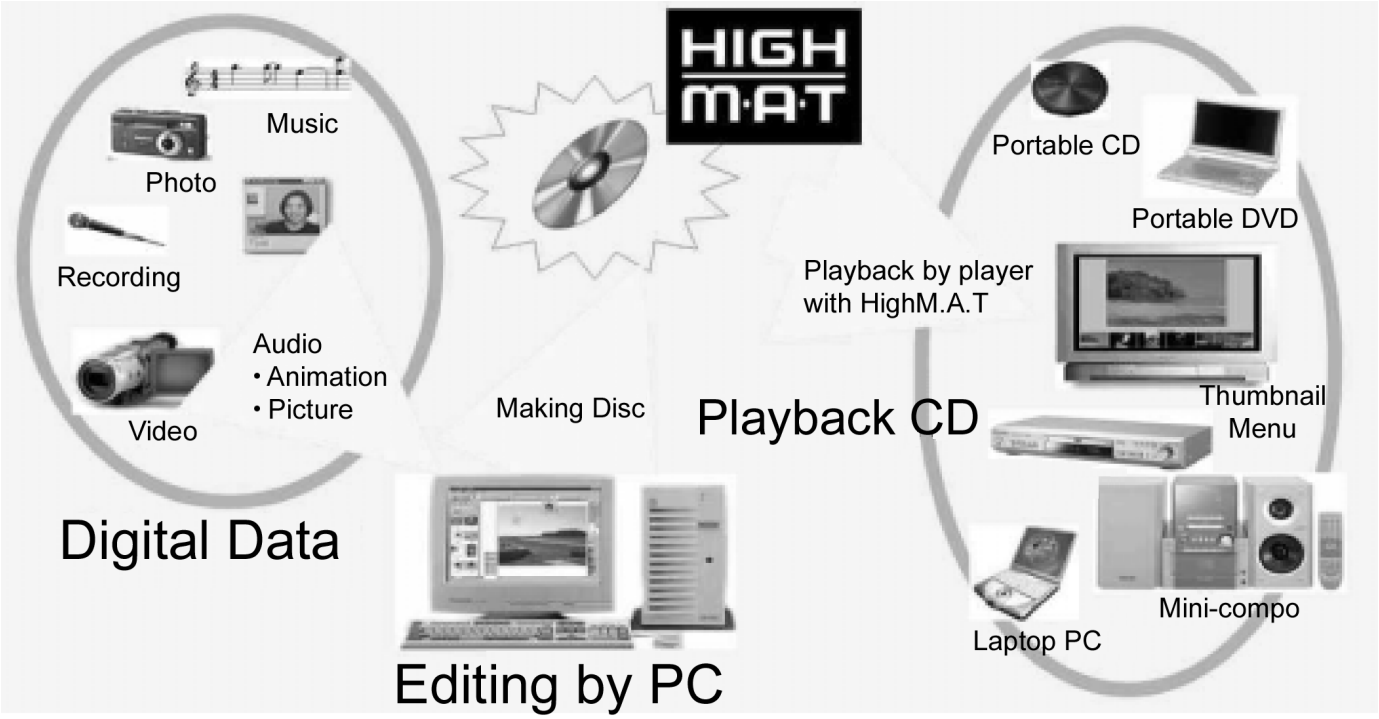

・Regardless of the types of consumer products, such as DVD players, portable CD players, car stereos and minicomputers, a consistent way to play for digital content will be created, and it will make it easier to retrieve data.



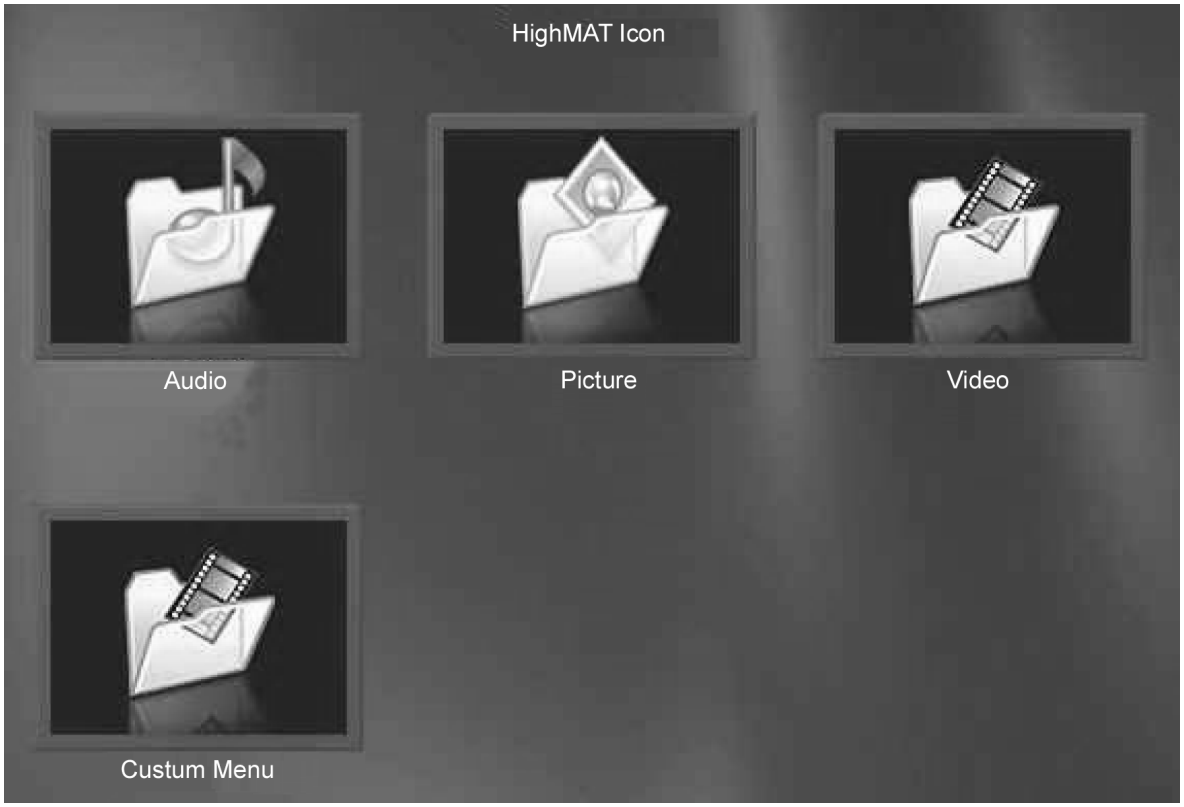

・You can also play digital content on the disc, which was created in accordance with the HighMAT format with a conventional CD-ROM player.

## 15.4. Outline of the HighMAT standard

1. Recording medium
   - ・CD-R/CD-RW
   - ・Supports ISO 9660 Level Expanded Joliet
   - ・For multiple session




2. Support data format
   - Level 1 player: WMA, MP3 (MPEG-1 Audio Layer 3)
   - Level 2 player: WMA, MP3 (MPEG-1 Audio Layer 3), JPEG
   - Level 3 player: WMA, MP3 (MPEG-1 Audio Layer 3), JPEG, WMV, MPEG4 (optional)
3. Limitation of data format
   - WMA, MP3 (MPEG-1 Audio Layer 3) 64 kbps - 160.999 kbps, 44.1 kHz, stereo, fixed bit rate/variable bit rate.
   - WMA, V2 and above, excluding Lossless/Voice/Pro
   - JPEG: Max 6M pixel, Maximum file size: 3 MB
4. Limitations regarding the number of files on the media, etc.
   - Total number of audio files: Maximum 450
   - Total number of still picture files: Maximum 999
   - Total number of animation files: Maximum 200
   - Total number of directories: Maximum 400
   - Length of a file name: Maximum 108 characters (Unicode)
   - Total number of play lists: Maximum 200
   - Number of contents in the playlist: Maximum 900
5. Composition of HighMAT disc
   - Menu: Classified for the navigation of the HighMAT digital contents. When menu selected, its submenu or the play list will be displayed.
   - Play list: A list in which one or more digital contents are arranged in order.
   - Group: Sub-divided group of a play list.
   - Digital Contents: Audio, still picture and animation data.

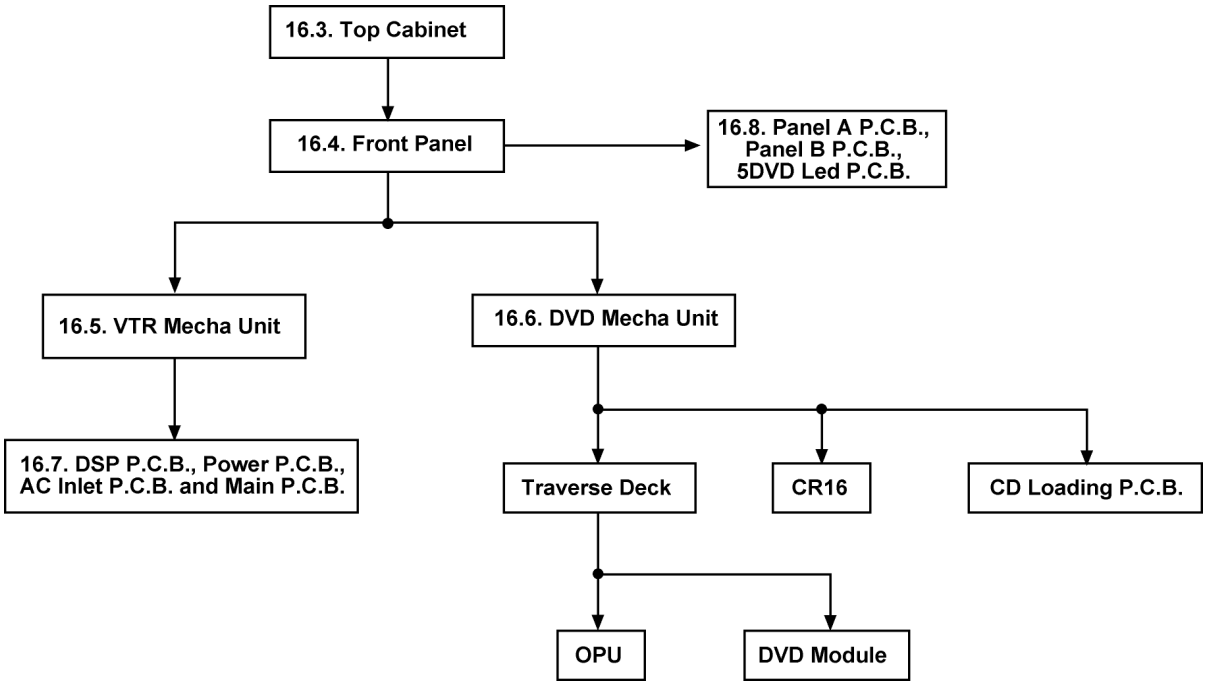

HighMAT Icon
Audio
Picture
Video
Custum Menu

# 16 Assembling and Disassembling

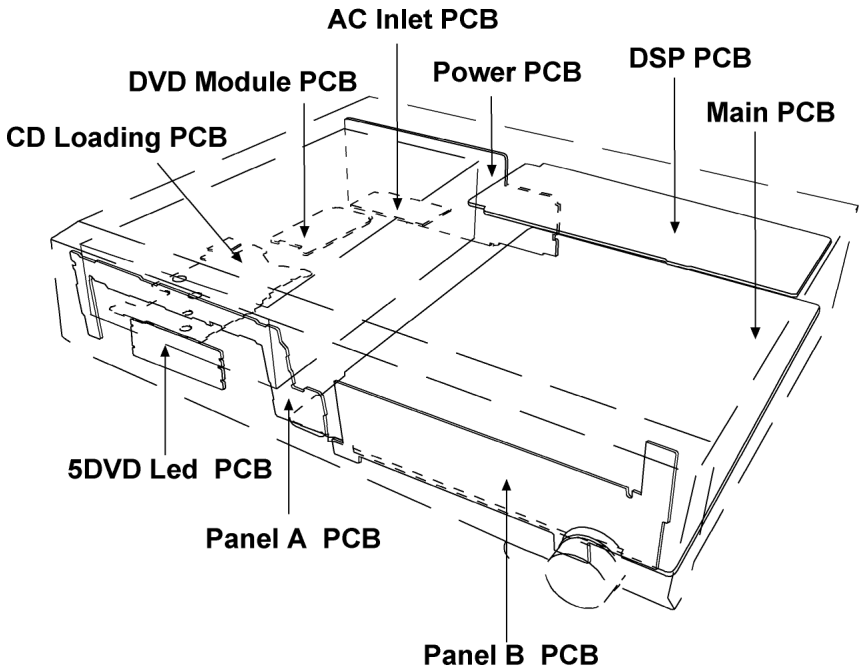
## 16.1. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

To assemble the unit, reverse the steps shown in the chart below.

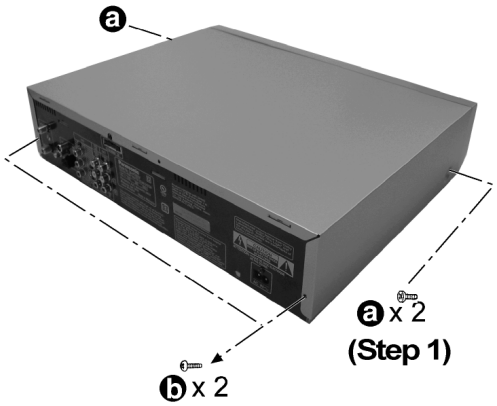

16.3. Top Cabinet
16.4. Front Panel
16.8. Panel A P.C.B., Panel B P.C.B., 5DVD Led P.C.B.
16.5. VTR Mecha Unit
16.6. DVD Mecha Unit
16.7. DSP P.C.B., Power P.C.B., AC Inlet P.C.B. and Main P.C.B.
Traverse Deck
CR16
CD Loading P.C.B.
OPU
DVD Module

## 16.2. P.C.B. Positions

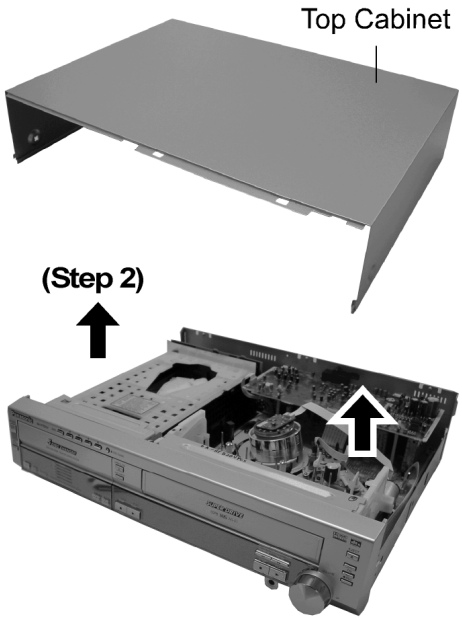


## 16.3. Disassembly of Top Cabinet

Step 1: Remove all the screws.



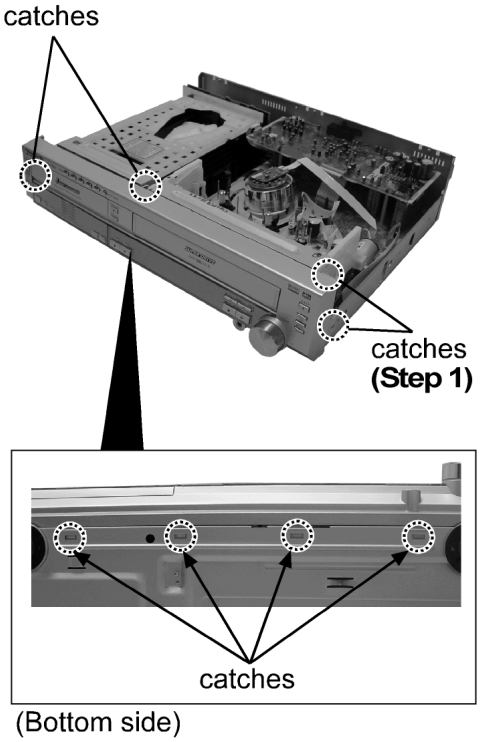

Step 2: Remove the Top Cabinet as arrow shown below.



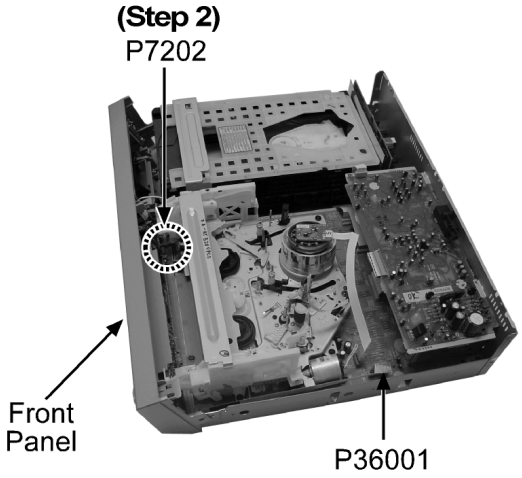

## 16.4. Disassembly of Front Panel

・Follow the (Step 1) to (Step 2) of item 16.3

Step 1: Release all the catches.

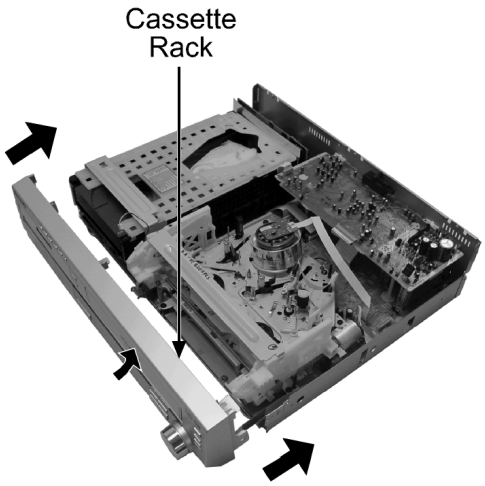


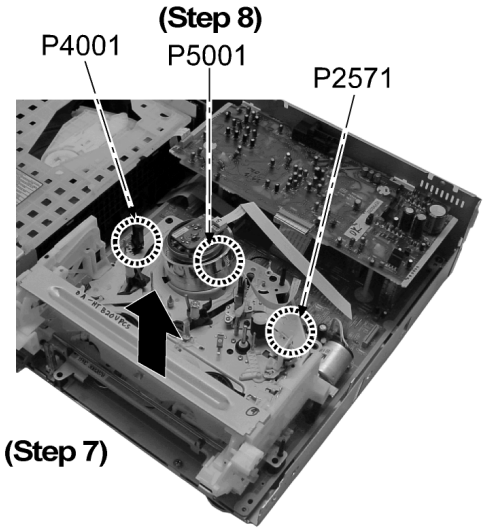

Step 2: Detach the P7202 and FFC board (P36001).




Caution of disassembly for Front Panel

Press upward the cassette rack to place the Front Panel.




## 16.5. Disassembly of VTR Mecha Unit

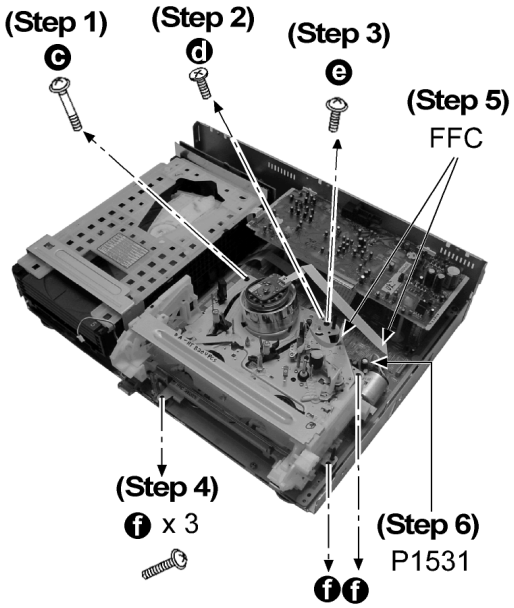
・Follow the (Step 1) to (Step 2) of item 16.3

・Follow the (Step 1) to (Step 2) of item 16.4

Step 1 to 4: Remove all the screws.

Step 5: Detach all the FFC board (P4002, P2501).

Step 6: Disconnect the connector (P1531).



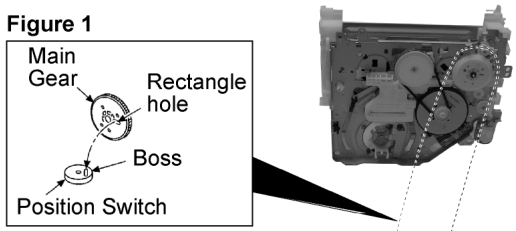

Step 7: Lift up the VTR Mecha Unit as arrow shown below.

Step 8: Detach the connector (P5001, P4001, P2571) carefully when lift up the VTR Mecha Unit.

Caution of assembly the VTR Mecha Unit

1. Join the marking ( △ )of the position switch tothe position of “EJECT” (the center part of the terminal). (Figure 2)
2. Assembly the boss at the position switch to the rectangular hole at the main gear. (Figure 1)

Figure 1



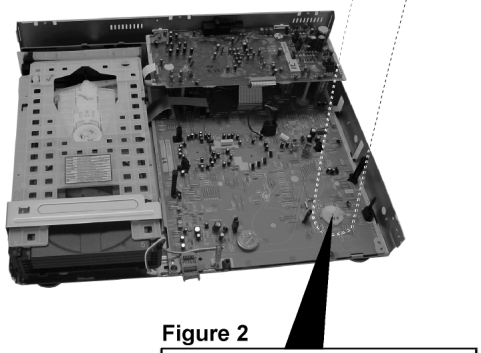
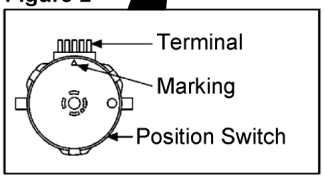
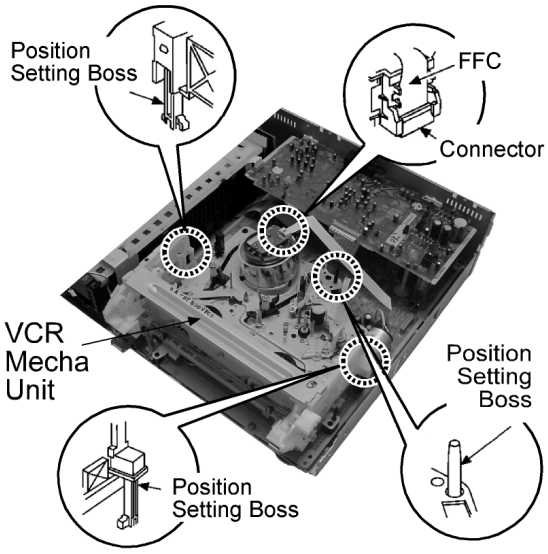



Figure 2



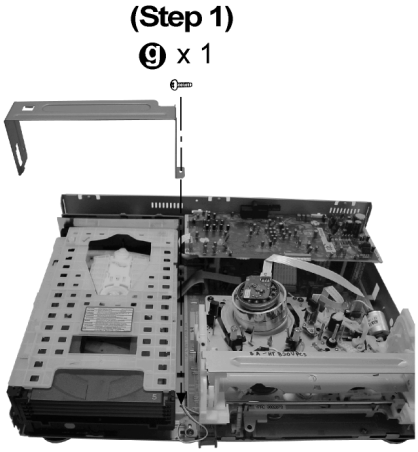

3. Slowly join back the VTR Mecha Unit to fit the position setting boss (3 locations) on the Main unit.
4. Make sure the FFC insert to the the connector (P5001).



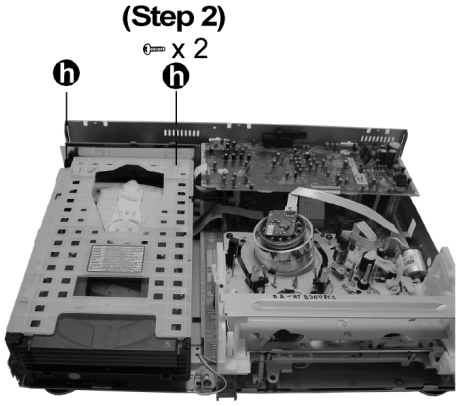

## 16.6. Disassembly of DVD Mecha Unit

- Follow the (Step 1) to (Step 2) of item 16.3
- Follow the (Step 1) to (Step 2) of item 16.4

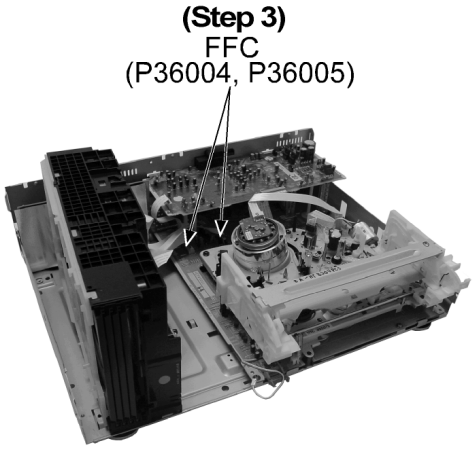
Step 1: Remove 1 screw and DVD Bracket.




Step 2: Remove 2 screws.




Step 3: Detach all the FFC board (P36004, P36005).

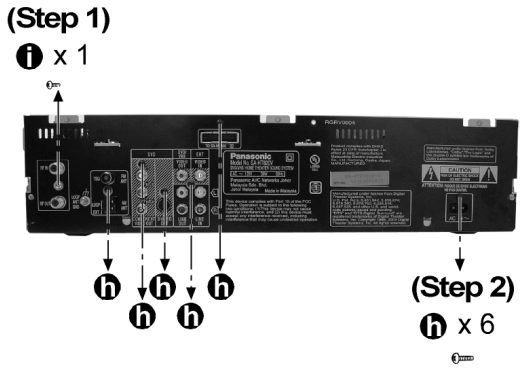



## 16.7. Disassembly of DSP, Power, AC Inlet and Main P.C.B.

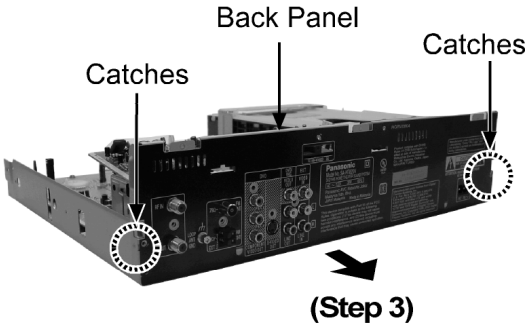
- Follow the (Step 1) to (Step 2) of item 16.3
- Follow the (Step 1) to (Step 8) of item 16.5
- Follow the (Step 3) of item 16.6

Step 1: Remove 1 screw.

Step 2: Remove 6 screws.

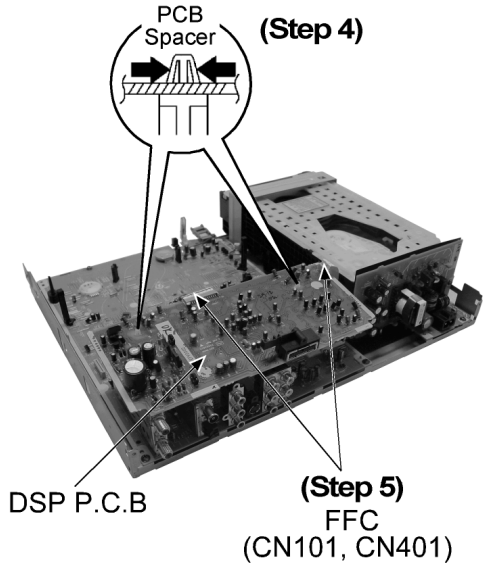



Step 3: Remove the back panel as arrow shown below.

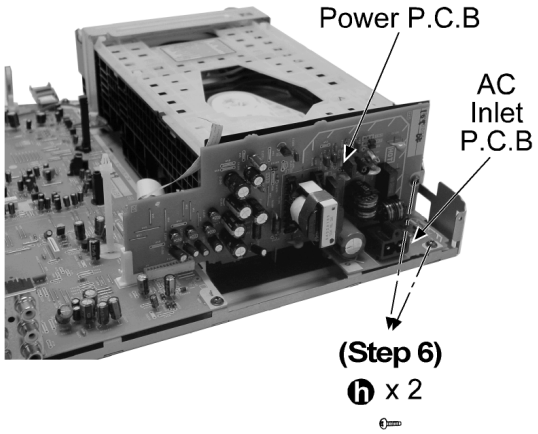



Step 4: Press the PCB Spacer as arrow shown and lift up the DSP P.C.B.

Step 5: Detach all the FFC board (CN101, CN401).

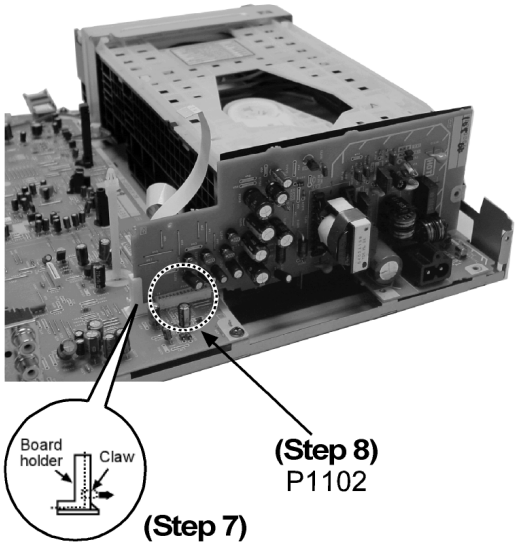



Step 6: Remove 2 screws.

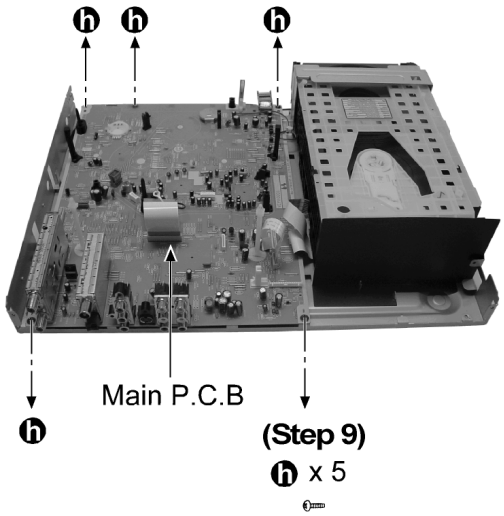



Step 7: Detach the POWER P.C.B. and AC INLET P.C.B. while removing tab on board holder.

Step 8: Detach the connector (P1102).




Step 9: Remove 5 screws.

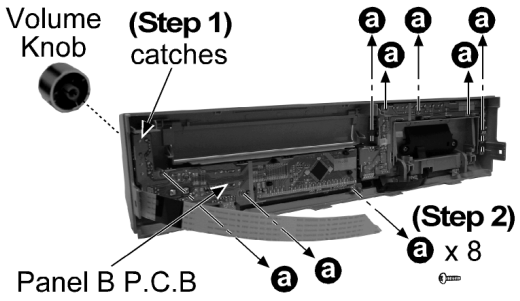



## 16.8. Disassembly of Panel A P.C.B., Panel B P.C.B. and 5DVD Led P.C.B.

- Follow the (Step 1) to (Step 2) of item 16.3
- Follow the (Step 1) to (Step 2) of item 16.4

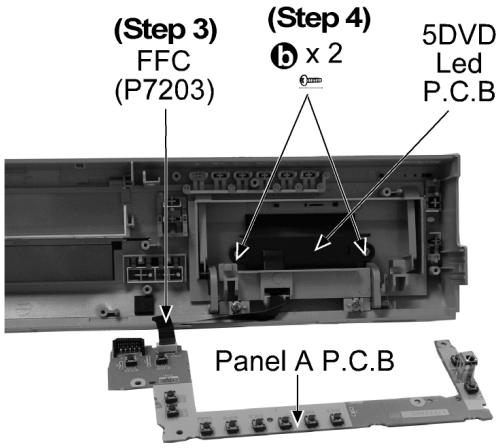
Step 1: Release the catches and remove Volume Knob.

Step 2: Remove 8 screws.




Step 3: Detach the FFC board (P7203).

Step 4: Remove 2 screws.



# 16.9. Procedure for removing CR16 mechanism (Precaution)

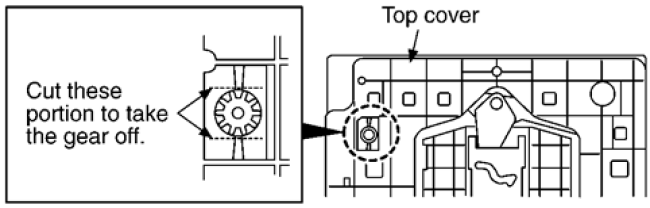
1. Turn off by pressing power SW in the body.
2. Unplug AC power cord after the indication of [GOOD-BYE], then disassemble the body.
3. Disassemble the body, and take out CD loading mechanism.
4. Perform disassembly according to the following procedure for disassembly.

# 16.10. CR16 mechanism disassembly procedure

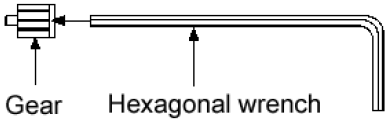
## 16.10.1. Gear for servicing information

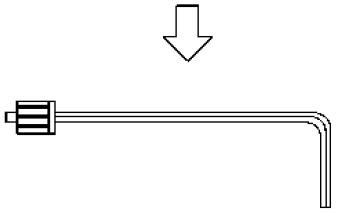
- This unit has a gear which used for chacking items (open/close of disc tray, up/down operation of traverse unit by manually) when servicing. (For gear information, that is described on the items for disassembly procedures.)
- For preparation of gear (for servicing), perform the procedures as follows.
- In case of re-servicing the same set, the " gear for servicing" may be took off because it had been used. So, the "gear for servicing" must be stored.

1. Remove the gear attached to top cover of CD loading mechanism.




2. Insert the hexgonal wrench (2.5mm) into the gear.



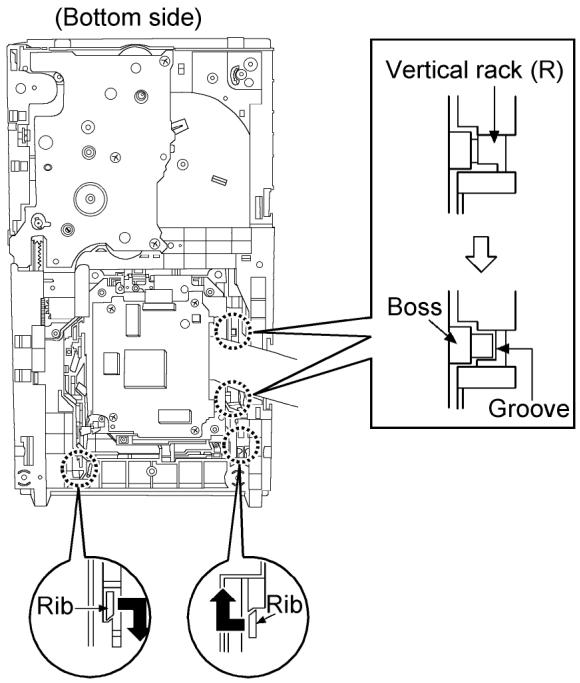
(Preparation of gear as jig is completed)

## 16.10.2. Replacement of traverse deck

- Follow the (Step 1) - (Step 2) of Item 16.3.
- Follow the (Step 1) - (Step 2) of Item 16.4.
- Follow the (Step 1) - (Step 5) of Item 16.6.

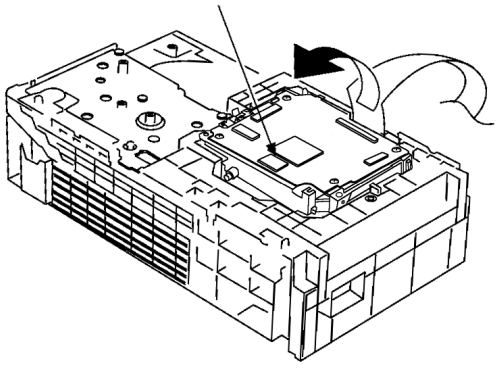
**(Step 1)**

Move ribs at both sides to the arrow direction
(The vertical rack (R) slides and the groove opens)




**(Step 2)**

Remove CD traverse deck rotating to the arrow direction

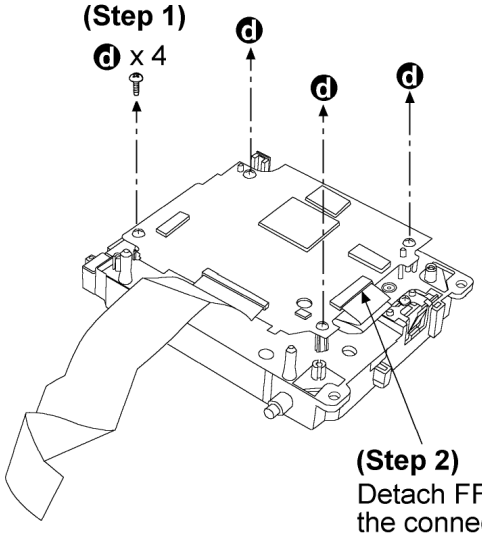


## 16.10.3. Replacement of optical pickup unit

- Follow the (Step 1) - (Step 2) of Item 16.3.
- Follow the (Step 1) - (Step 2) of Item 16.4.
- Follow the (Step 1) - (Step 5) of Item 16.6.
- Follow the (Step 1) - (Step 2) of Item 16.10.2.

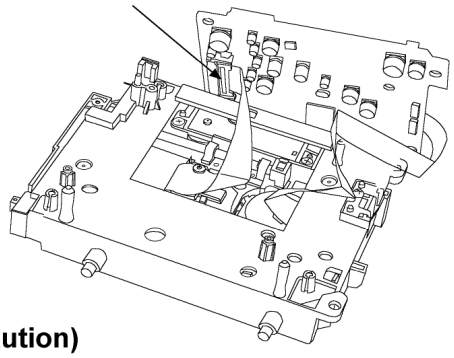
**(Step 1)**

ⓓ x 4

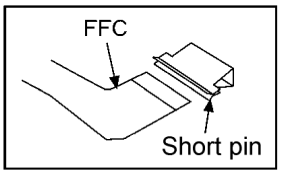


**(Step 2)**
Detach FFC from the connector

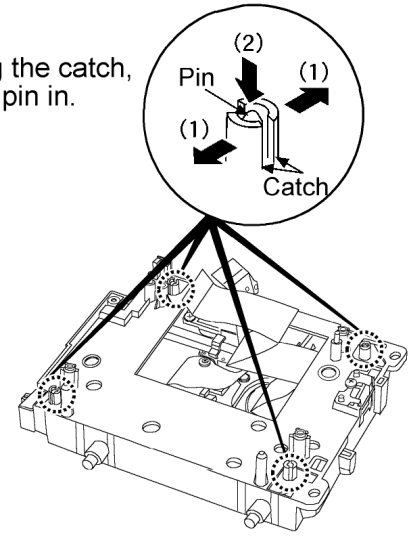
**(Step 3)**
Pull out FFC from the connector



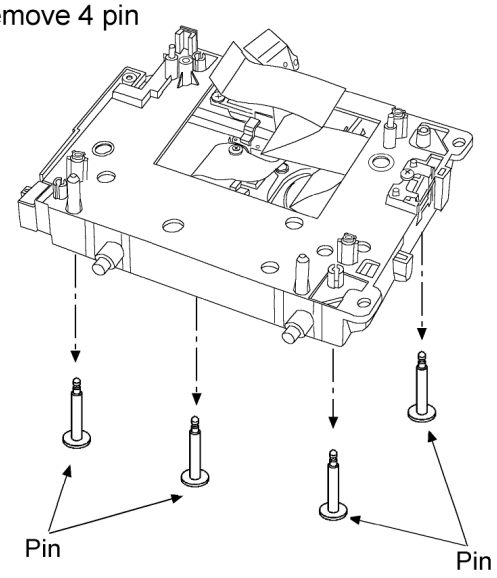
**(Caution)**
Insert a short pin into FFC of the optical pickup. [See “Notice on handling of the optical pickup”]



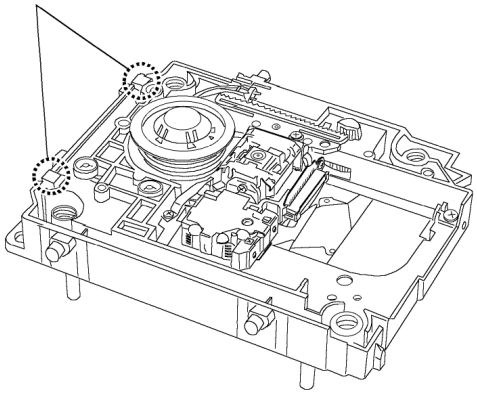

**(Step 4)**
Widening the catch, push the pin in.



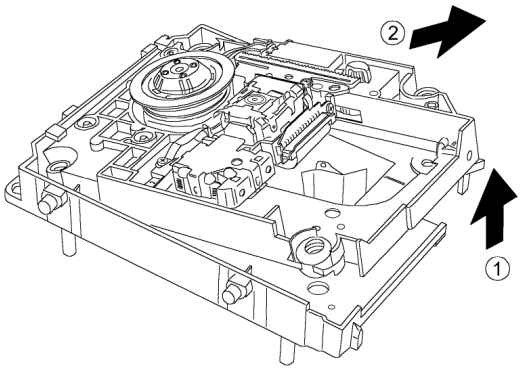

**(Step 5)**
Remove 4 pin



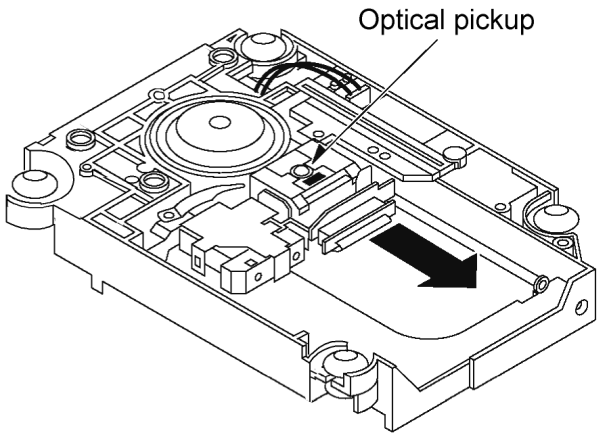

**(Caution)**
Be careful the catches when remove the traverse deck unit.



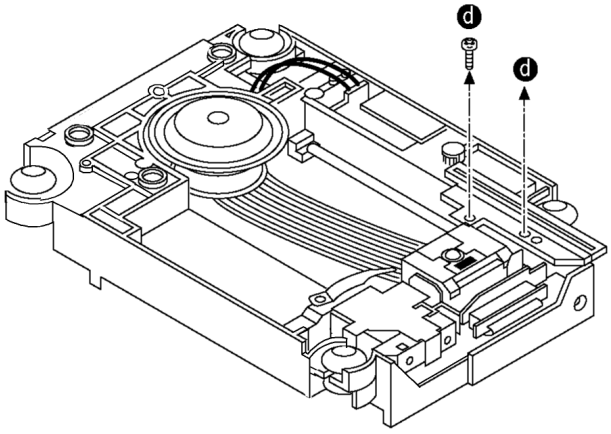
**(Step 6)**
Remove the traverse deck unit as arrow shown.

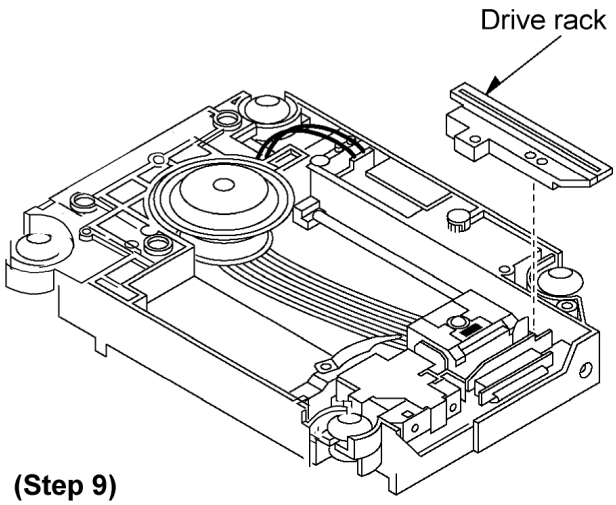


**(Step 7)**
Shift the optical pickup to the furthest backward as arrow shown.

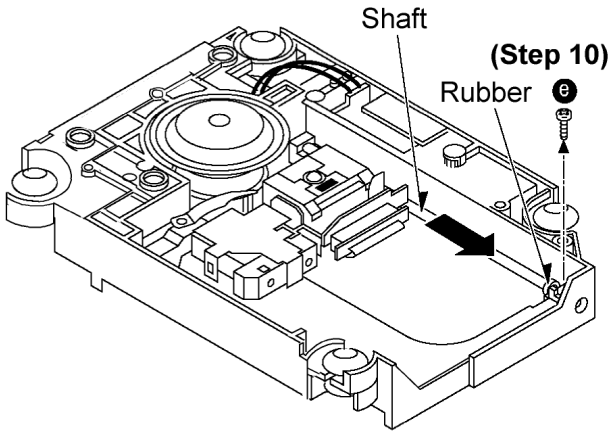



**(Step 8)**



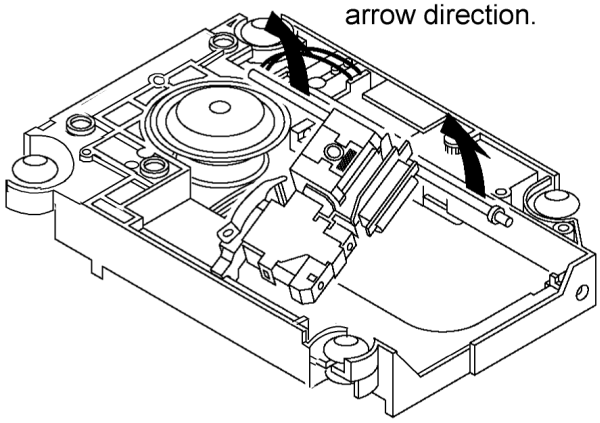




**(Step 9)**
Remove the drive rack.

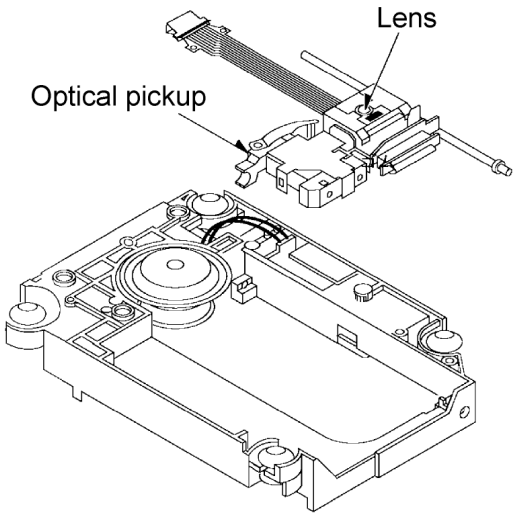



**(Step 10)**

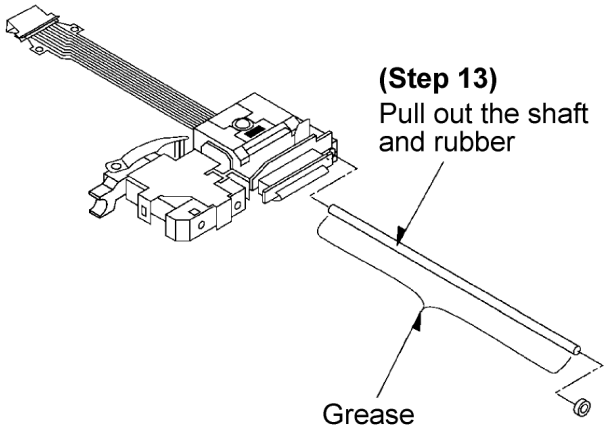
**(Step 11)**
Shift the shaft to the arrow direction.

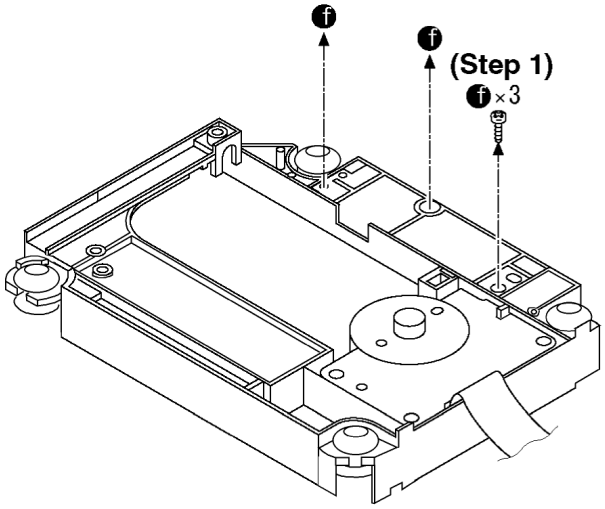


**(Step 12)**
Lift the optical pickup unit with the shaft.



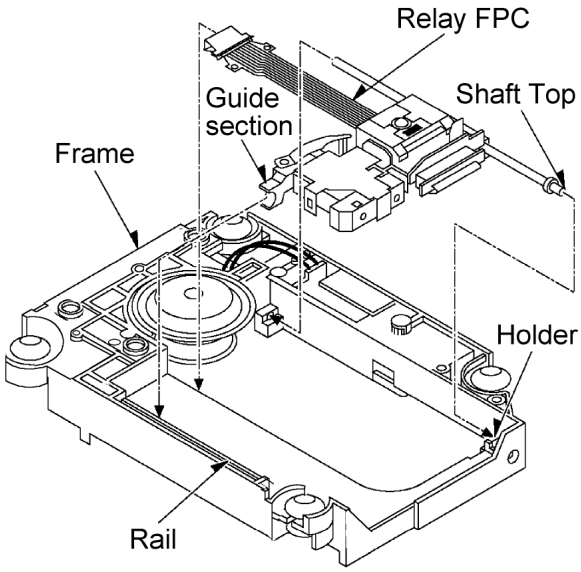

**(Caution)**
1. Do not subject optical pickup to static electricity as it is extremely sensitive to electrical shock
2. Do not touch the lens of the optical pickup



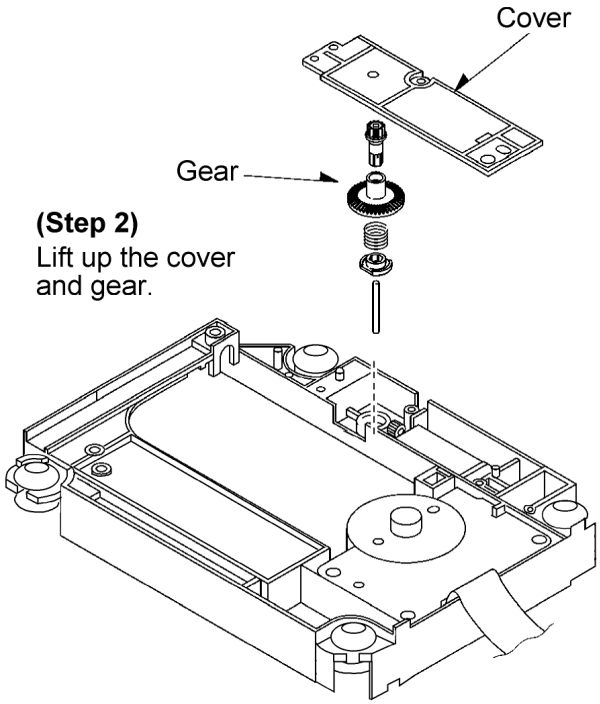

Procedure for Assembly of Optical Pickup Unit

**(Step 1)**
Put relay FPC into a hole of frame

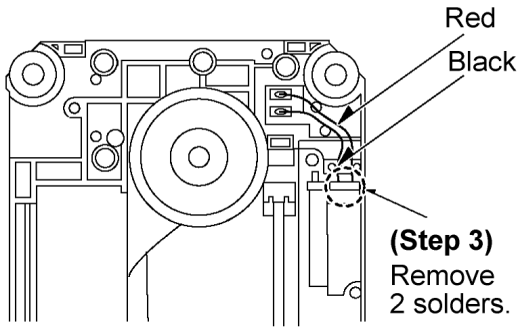



**(Step 3)**
Put shaft top
into the holder.

**(Step 2)**
Fit optical pickup
unit guide into
the rail.



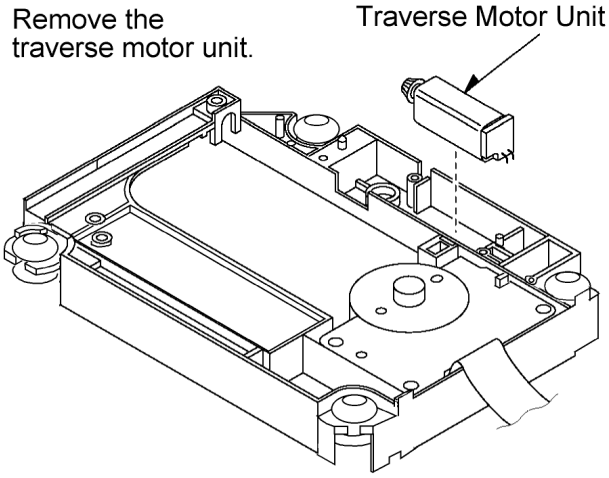

**(Step 2)**
Lift up the cover
and gear.

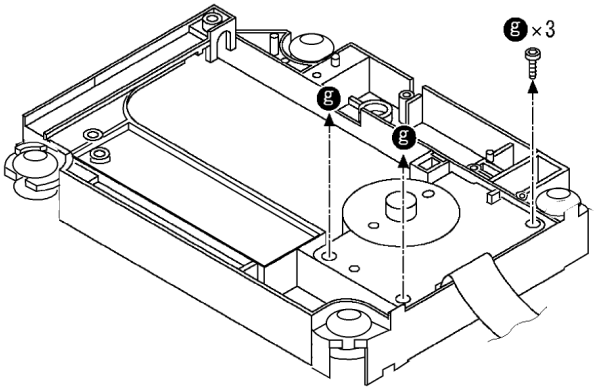



## 16.10.4. Disassembly of Traverse Motor (Unit) and Spindle Motor (Unit)

- Follow the (Step 1) - (Step 2) of Item 16.3.
- Follow the (Step 1) - (Step 2) of Item 16.4.
- Follow the (Step 1) - (Step 5) of Item 16.6.
- Follow the (Step 1) - (Step 2) of Item 16.10.2.
- Follow the (Step 1) - (Step 13) of Item 16.10.3.

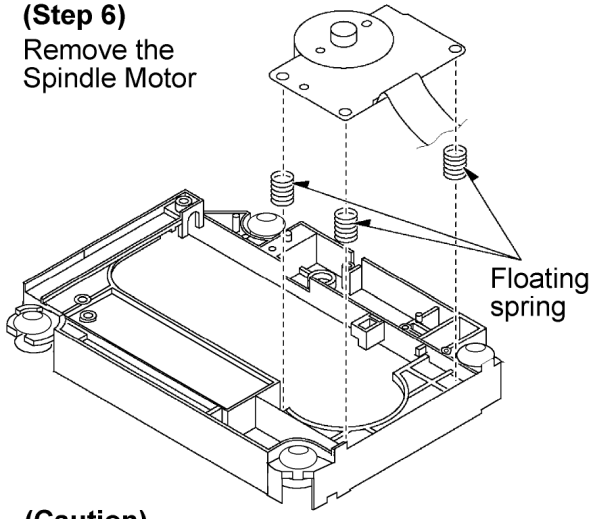
**(Step 4)**
Remove the traverse motor unit.




**(Step 5)**
Remove 3 screws with 1.8mm slotted screwdriver.

**(Step 6)**
Remove the Spindle Motor

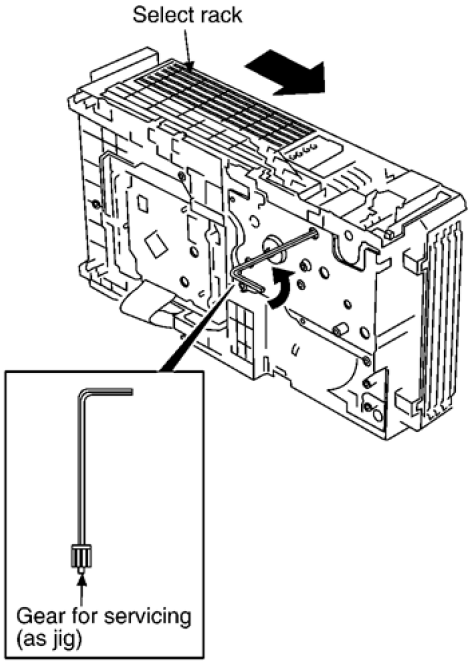



**(Caution)**
As floating springs (3 pieces) come off at the same time, be careful not to lose them.

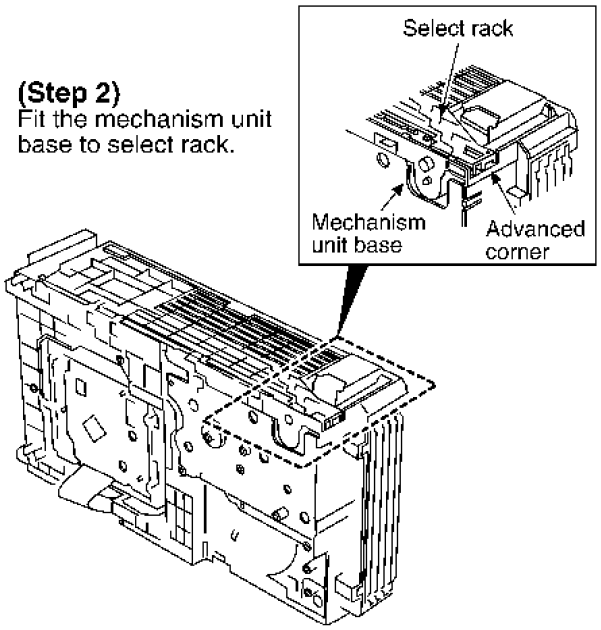
## 16.10.5. Replacement for the disc tray

- Follow the (Step 1) - (Step 2) of Item 16.3.
- Follow the (Step 1) - (Step 2) of Item 16.4.
- Follow the (Step 1) - (Step 5) of Item 16.6.

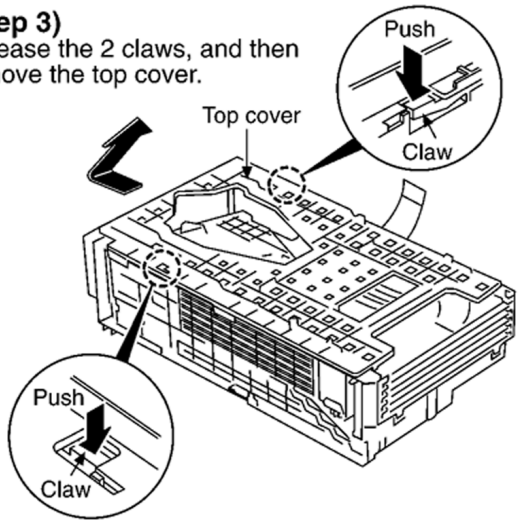
**(Step 1)**
Rotate the gear for servicing and move the select rack to advanced corner.



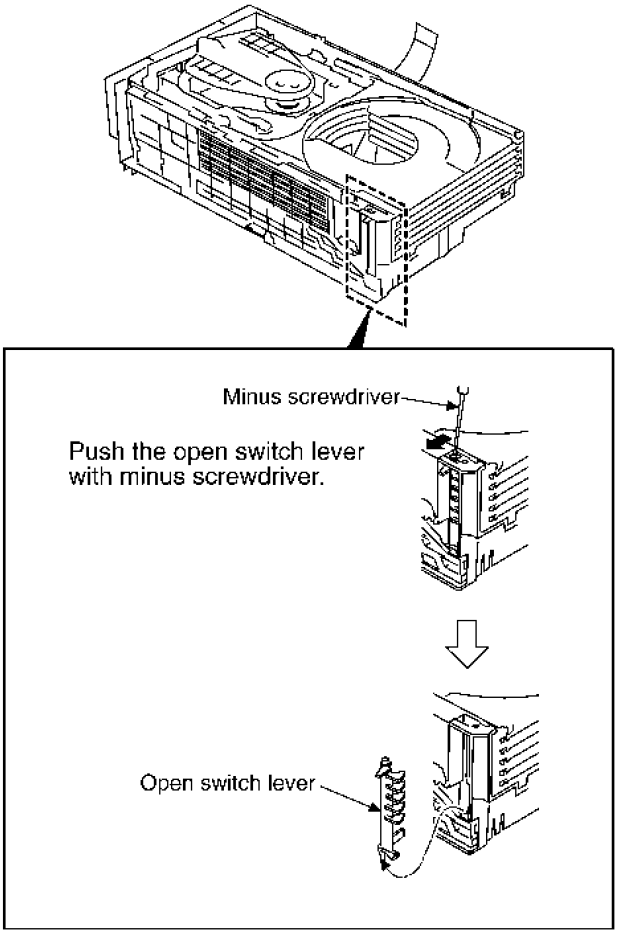

**(Step 2)**
Fit the mechanism unit base to select rack.



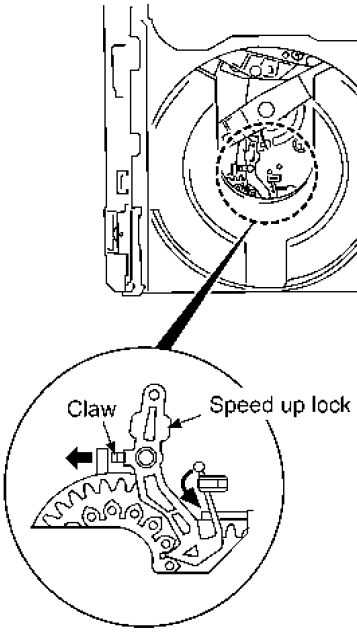

**(Step 3)**
Release the 2 claws, and then remove the top cover.



**(Step 4)**
Remove the open switch lever.



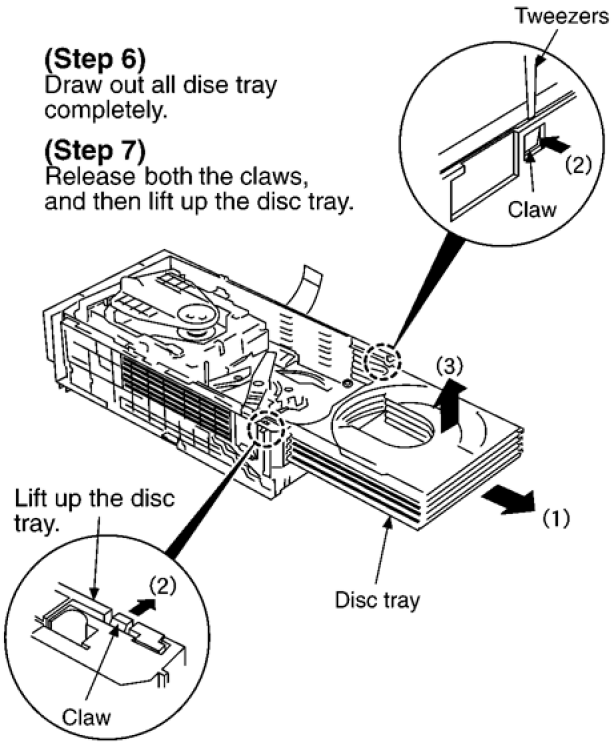

**(Step 5)**
Release the claw, and then remove the speed up lock.



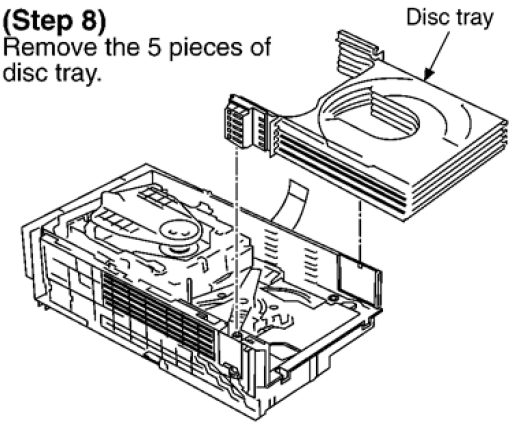

Insert the tweezers between the mechanism base and disc tray, and then lift up the disc tray.

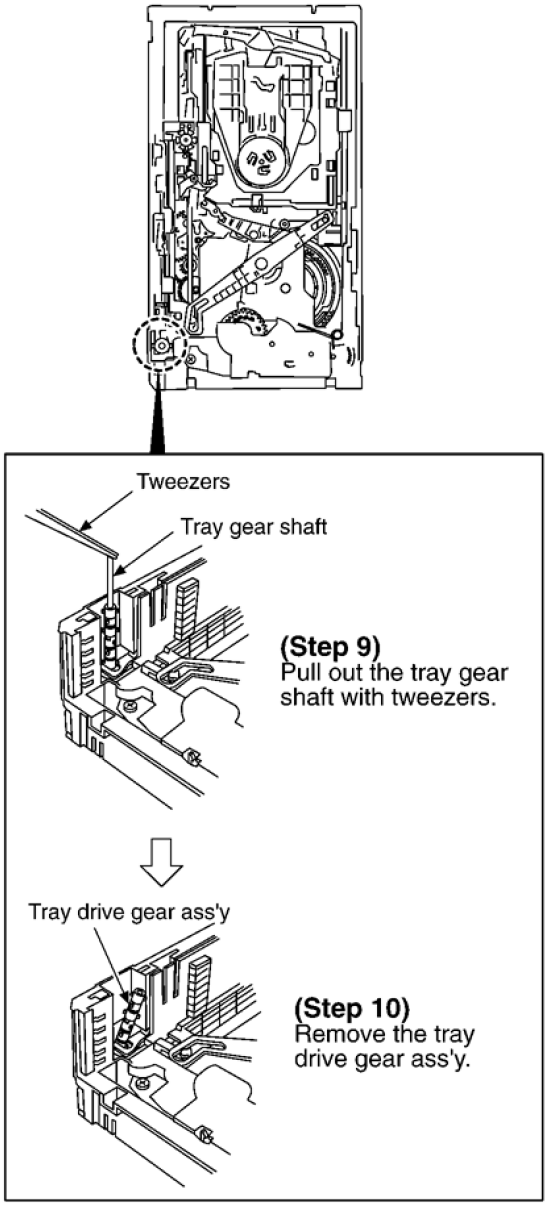
**(Step 6)**
Draw out all dise tray completely.

**(Step 7)**
Release both the claws, and then lift up the disc tray.




**(Step 8)**
Remove the 5 pieces of disc tray.



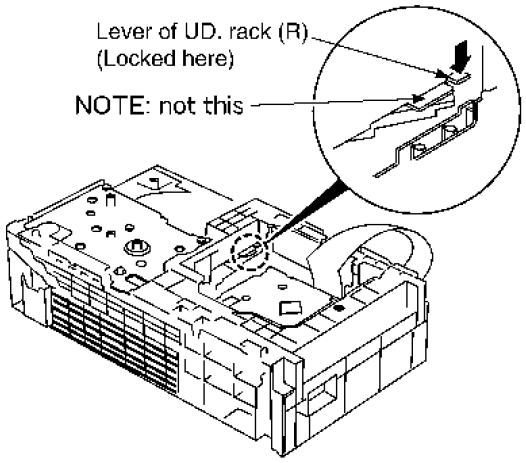



## 16.10.6. Replacement for the traverse deck

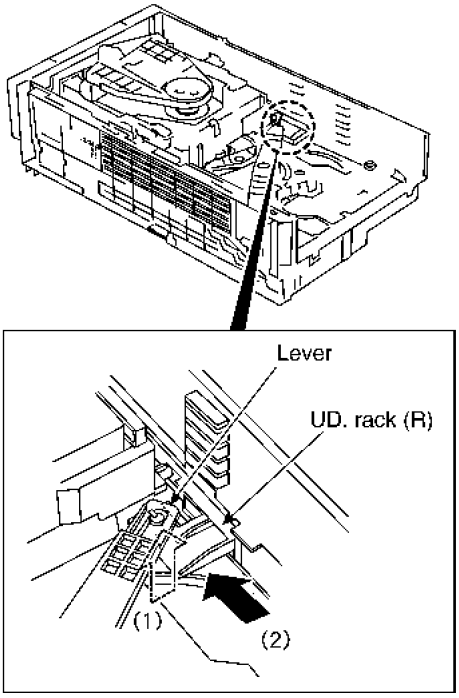
- Follow the (Step 1) - (Step 2) of Item 16.3.
- Follow the (Step 1) - (Step 2) of Item 16.4.
- Follow the (Step 1) - (Step 5) of Item 16.6.
- Follow the (Step 1) - (Step 10) of Item 16.10.5.

**(Step 1)**
Confirm the position for lever of UD. rack (R) to remove traverse unit.

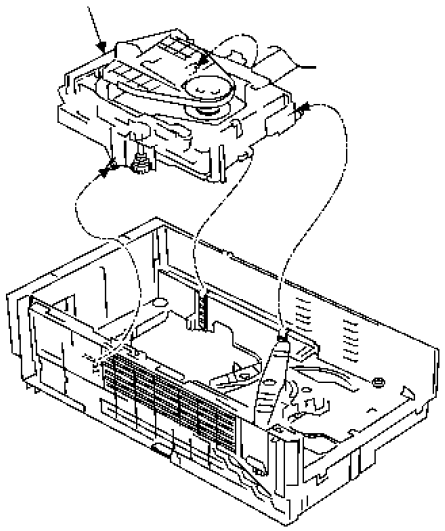
**(Step 2)**
Turn the unit over. (Upside: P.C.B.)




**(Step 3)**
Turn the unit over again, slide UD. rack (R) while pushing up the lever from the bottom.

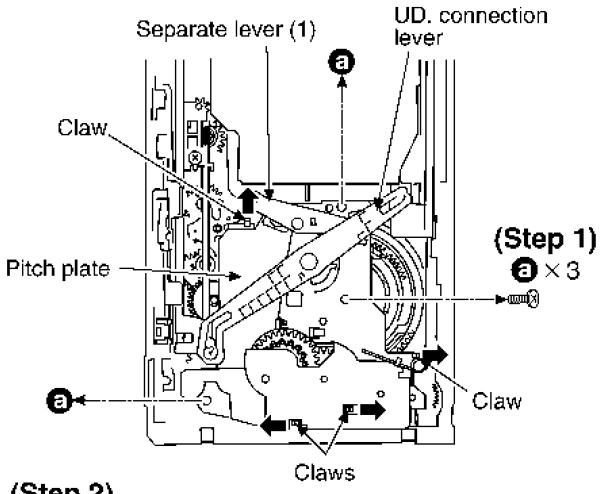


**(Step 4)**
Remove the traverse unit.



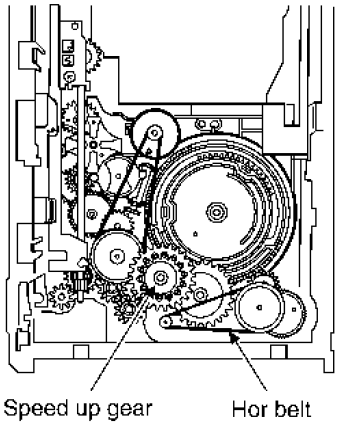
## 16.10.7. Disassembly for loading unit

- Follow the (Step 1) - (Step 2) of Item 16.3.
- Follow the (Step 1) - (Step 2) of Item 16.4.
- Follow the (Step 1) - (Step 5) of Item 16.6.
- Follow the (Step 1) - (Step 10) of Item 16.10.5.
- Follow the (Step 1) - (Step 4) of Item 16.10.6.

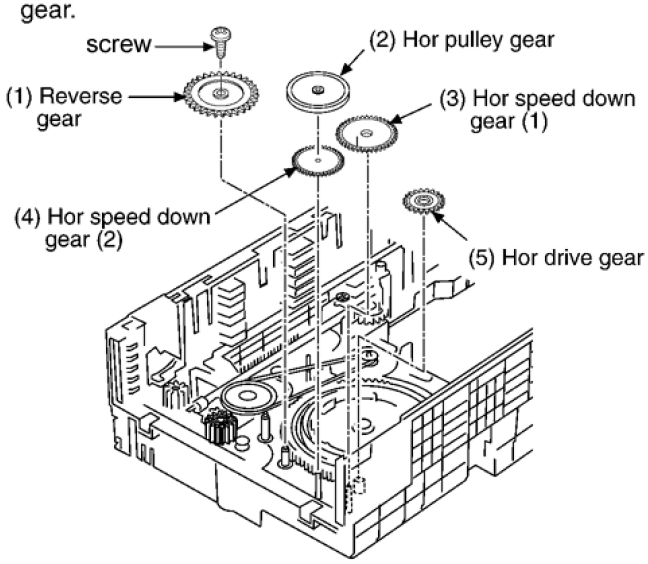



**(Step 2)**
Release the 4 claws, and then remove the pitch plate together with separate lever (1) and UD. connection lever.

**(Step 3)**
Remove the speed up gear and hor belt.

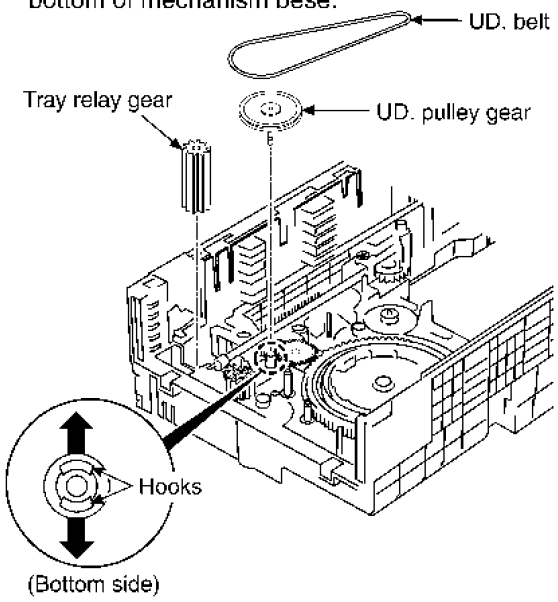



**(Step 4)**
Remove the reverse gear, hor pulley gear, hor speed down gear (1), hor speed down gear (2) and hor drive gear.

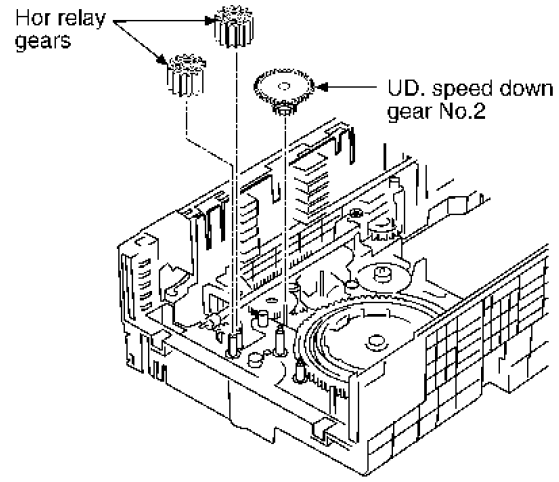



**(Step 5)**
Remove the UD. belt and tray relay gear.

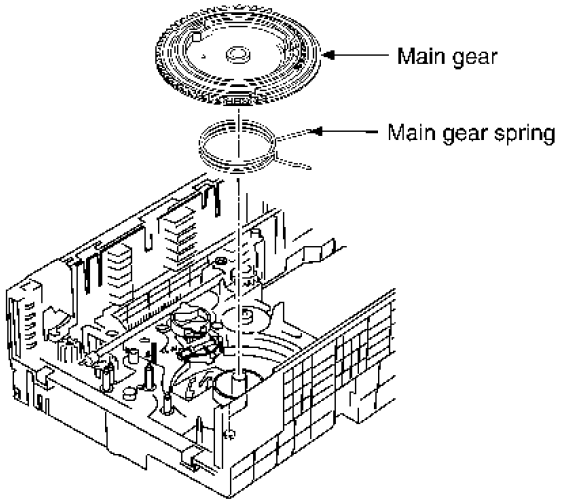
**(Step 6)**
Pull out the UD. pulley gear, loosen 2 hooks of the bottom of mechanism bese.



**(Step 7)**
Remove the 2 hor relay gears and UD. speed down gear No.2.

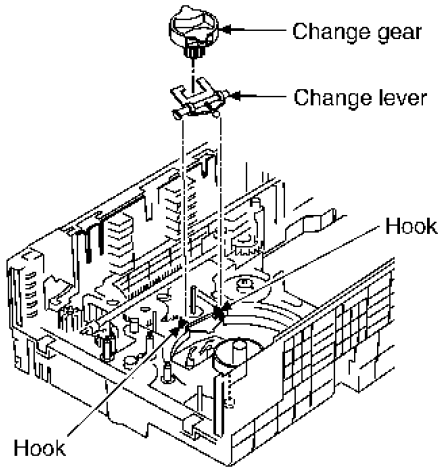


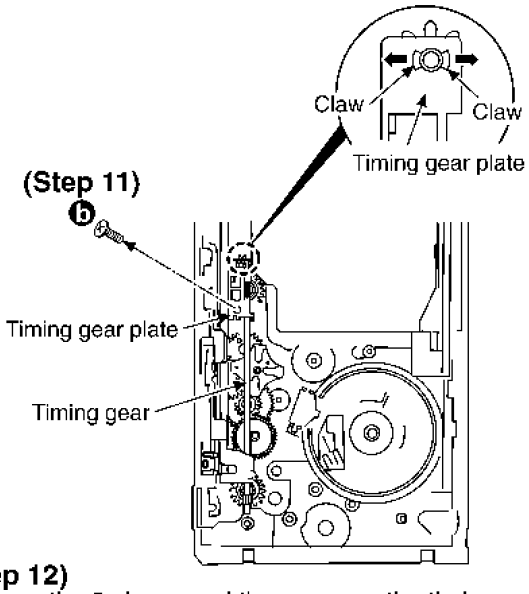

**(Step 8)**
Remove the main gear and main gear spring.




**(Step 9)**
Remove the change gear.

**(Step 10)**
Raise the change lever upright, and pull it out of hook.

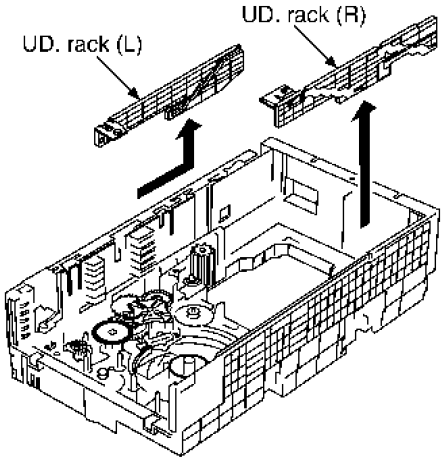


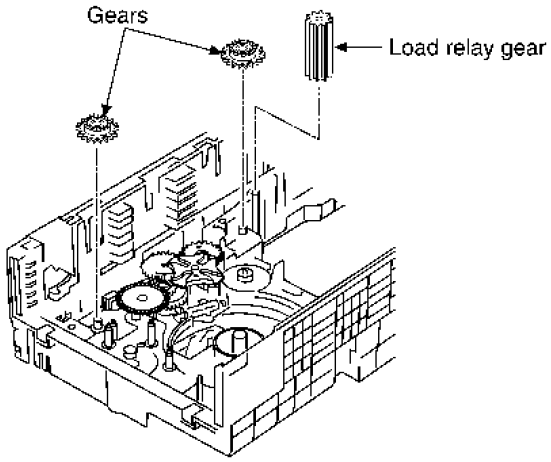

**(Step 12)**
Release the 2 claws, and then remove the timing gear and timing gear plate.

**(Step 13)**
Move the UD. rack (L) to backward, and then remove it.

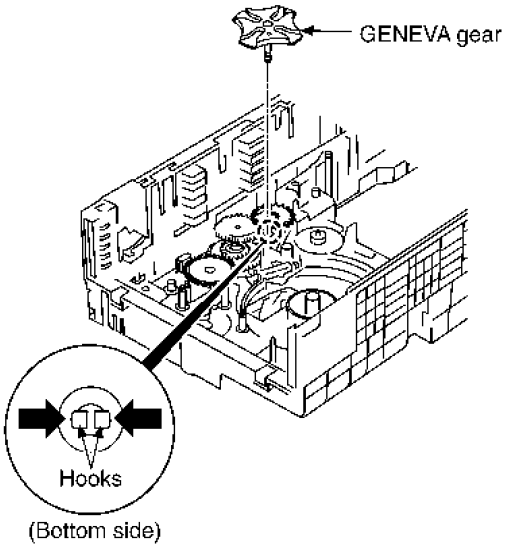
**(Step 14)**
Remove the UD. rack (R).



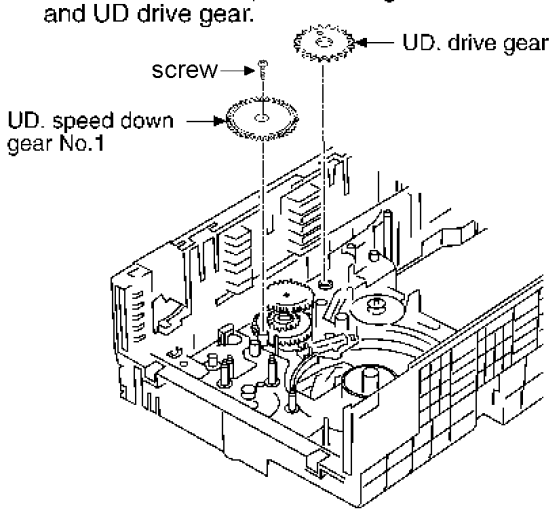

**(Step 15)**
Remove the 2 gears and load relay gear.



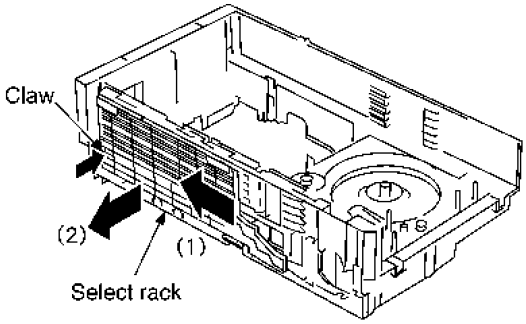
**(Step 16)**
Pull out the GENEVA gear, loosen 2 hooks of the bottom of mechanism base.

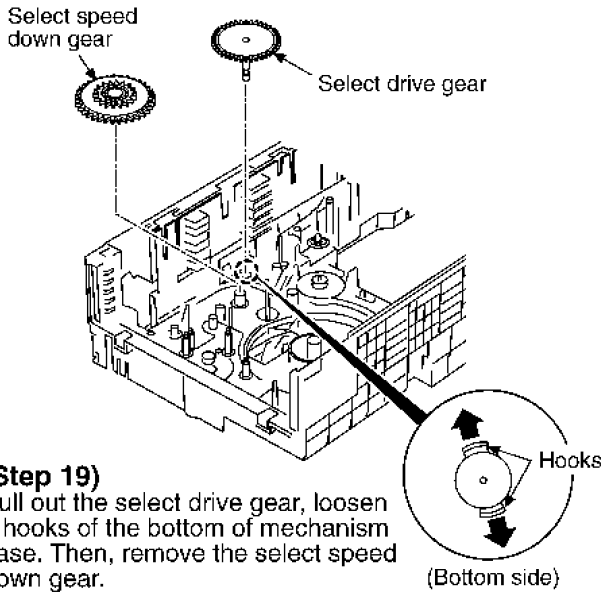



**(Step 17)**
Remove the UD. speed down gear No.1 and UD drive gear.



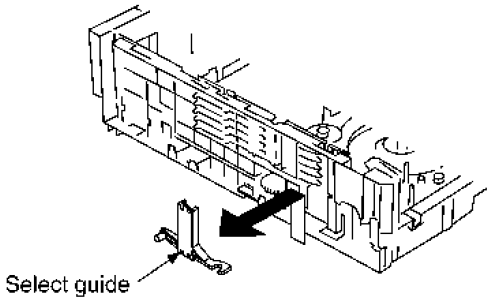

**(Step 18)**
Slide the select rack to the edge direction of the arrow (1). Push the claw and pull out to arrow (2) while sliding the select rack to the arrow (1).



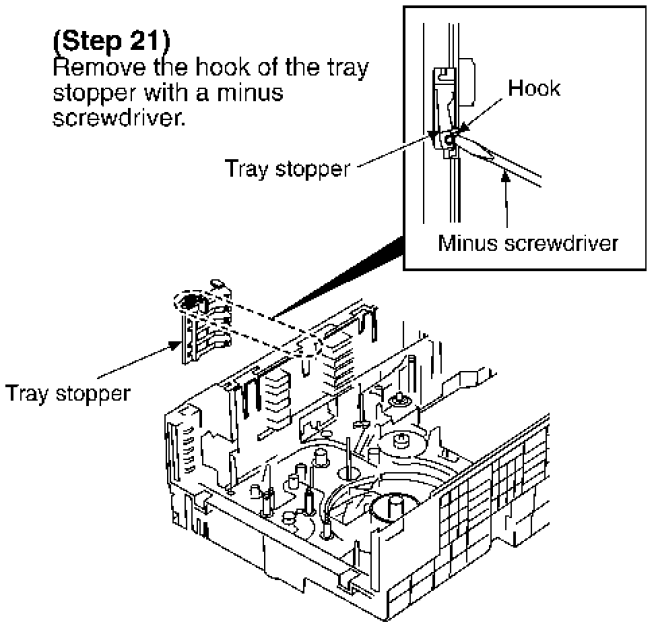




**(Step 19)**
Pull out the select drive gear, loosen 2 hooks of the bottom of mechanism base. Then, remove the select speed down gear.

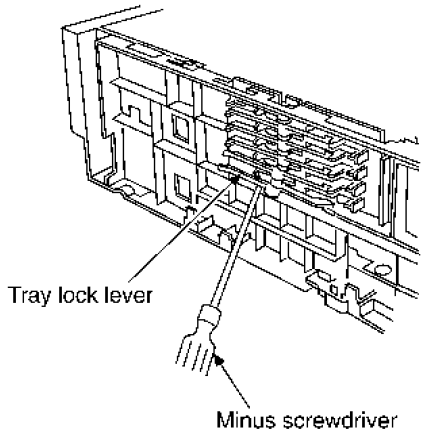
**(Step 20)**
Remove the select guide after sliding upside.




**(Step 21)**
Remove the hook of the tray stopper with a minus screwdriver.



**(Step 22)**
Remove the bottom of the tray lock lever with a minus screwdriver and others.



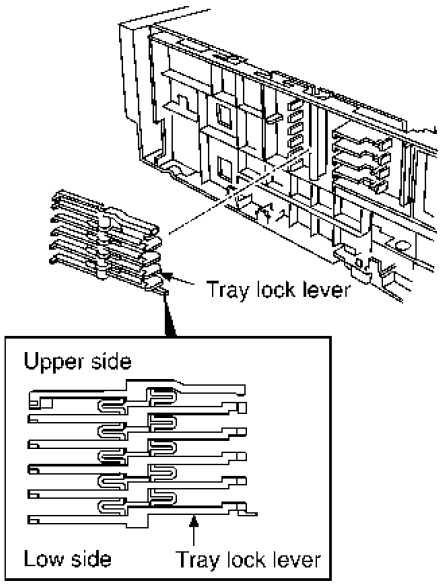

## 16.11. CR16 MECHANISM ASSEMBLY PROCEDURE

**The following specified greases and/or oil must be applied when some specific parts are changed.**

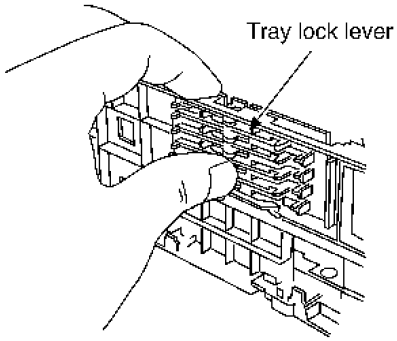
1. Floil grease (VFK1298) : The floil grease must be applied to tray, tray (L) and tray (R).
2. Hanarl oil (VFK1700) : The hanarl oil must be applied to any parts with grease other than the said parts.

- Follow the (Step 1) - (Step 2) of Item 16.3.
- Follow the (Step 1) - (Step 2) of Item 16.4.
- Follow the (Step 1) - (Step 5) of Item 16.6.
- Follow the (Step 1) - (Step 10) of Item 16.10.5.
- Follow the (Step 1) - (Step 4) of Item 16.10.6.
- Follow the (Step 1) - (Step 22) of Item 16.10.7.

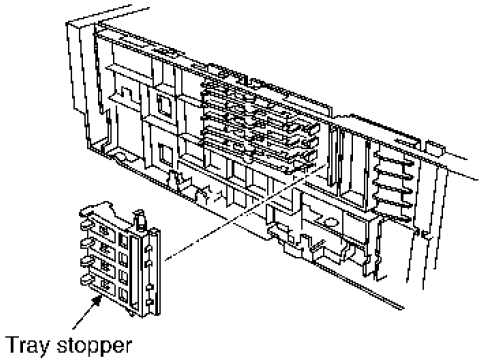
**(Step 1)**
Install the tray lock lever to mechanism base.



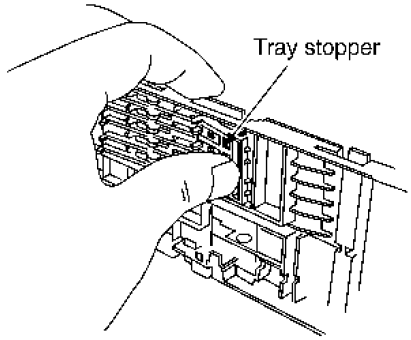

**(Step 2)**
Push the tray lock lever with a hand and install it.



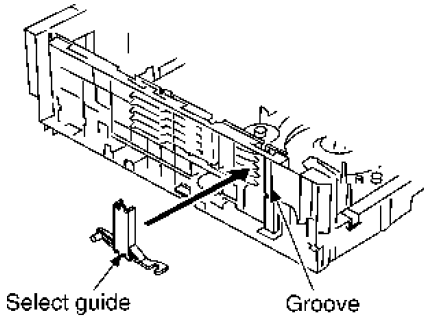

**(Step 3)**
Install the tray stopper to mechanism bese.




**(Step 4)**
Push the tray stopper with a hand and install it.

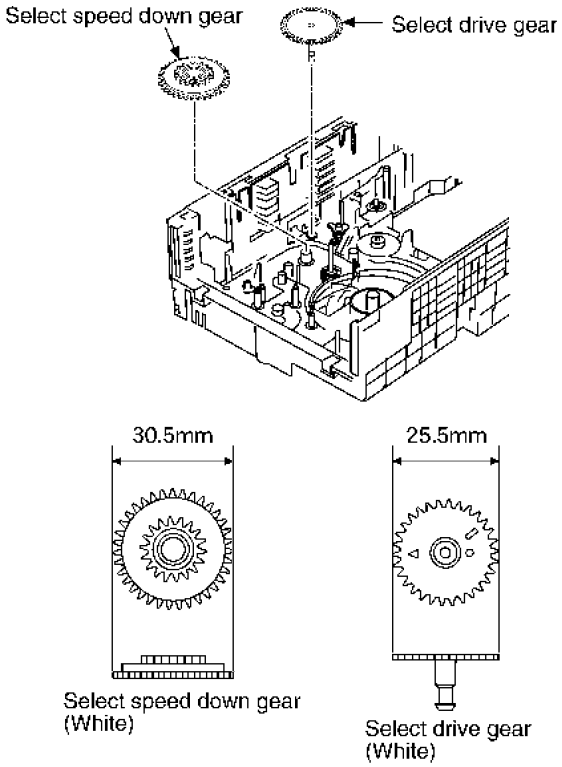



**(Step 5)**
Insert the select guide with a groove of the mechanism base and move it below.

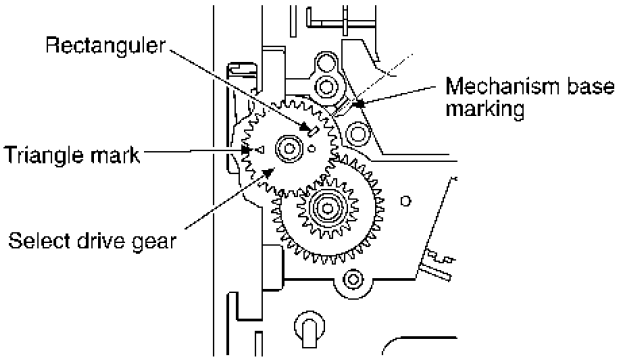


**(Step 6)**
Install the select speed down gear to mechanism base.

**(Step 7)**
Install the select drive gear to mechanism base.

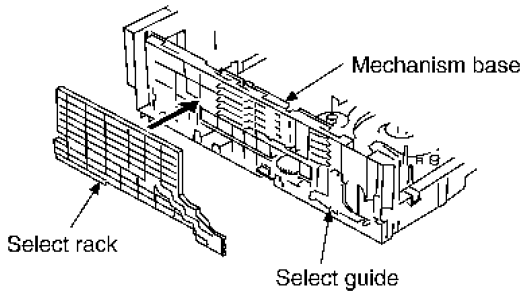



**(Step 8)**
Fit a mechanism base marking to the rectanguler mark of gear so that the triangle mark can indicate the sideward direction.

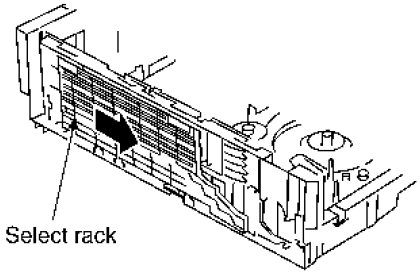



**(Step 9)**
Install the select rack to mechanism base.
Checking items before the installation.
1. Check select guide is completely in lowest position.
2. Check its phase of select drive gear is correct position.(Rectangle/Trianguler mark)(Refer to Step 8)

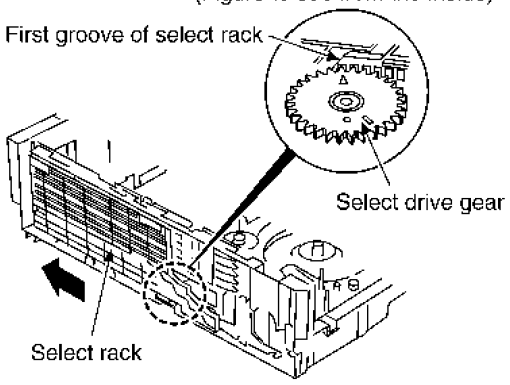
1. Put a select rack down with it fitted to its circumference of mechanism base.




2. Slide the select rack with it's pushing to a little right direction and install it.

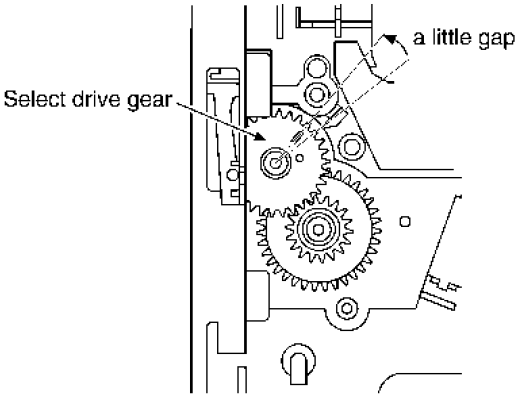



(Figure to see from the inside)

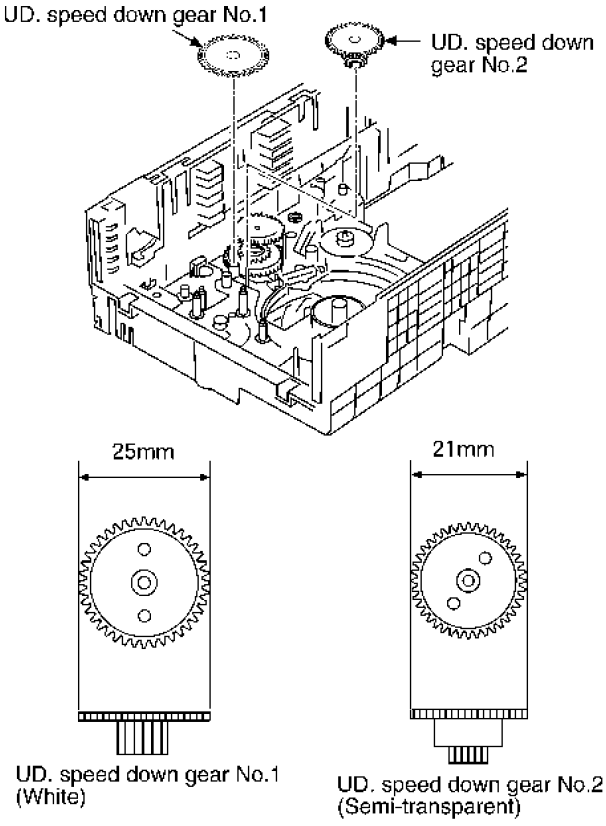



3. Check whether its end of triangular mark is in first groove of select rack, after fixing.
4. After insertion of select rack, continue the following work until the indication that it gose forward. And, all the while it must be checked that select rack is in the extreme end.

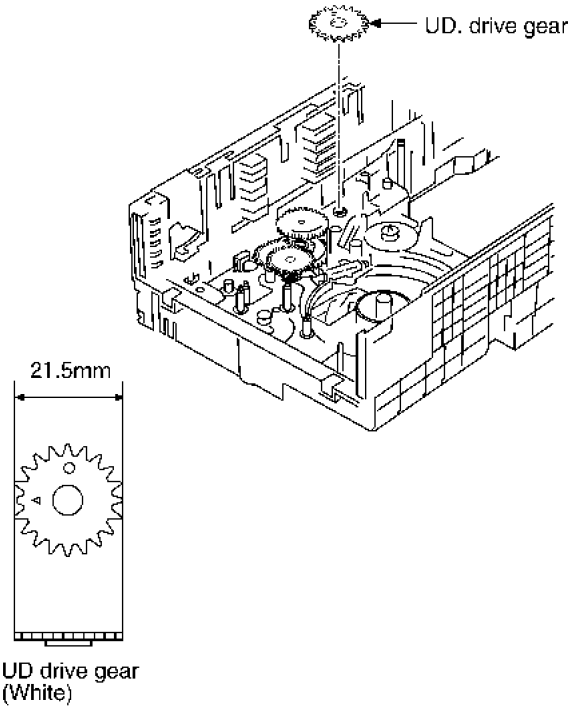
5. After insertion the select rack, the marking of select gear has a little gap when it is in the extreme end.



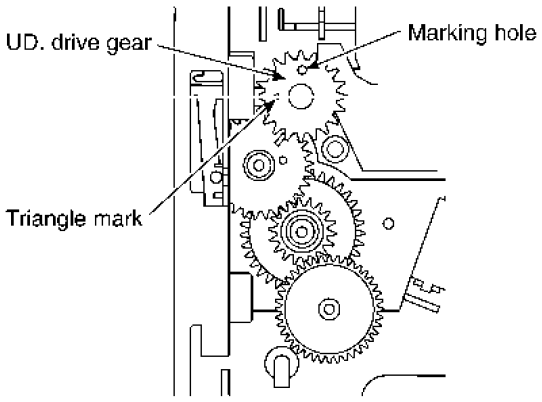

**(Step 10)**
Install the UD. speed down gear No.1 and UD. speed down gear No.2.


UD. speed down gear No.1
UD. speed down gear No.2
25mm
21mm
UD. speed down gear No.1 (White)
UD. speed down gear No.2 (Semi-transparent)

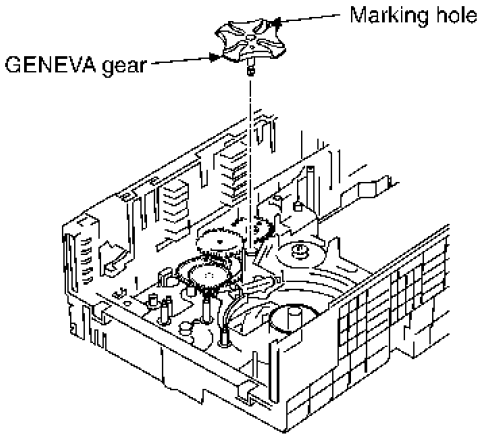
**(Step 11)**
Install the UD. drive gear to mechanism base.

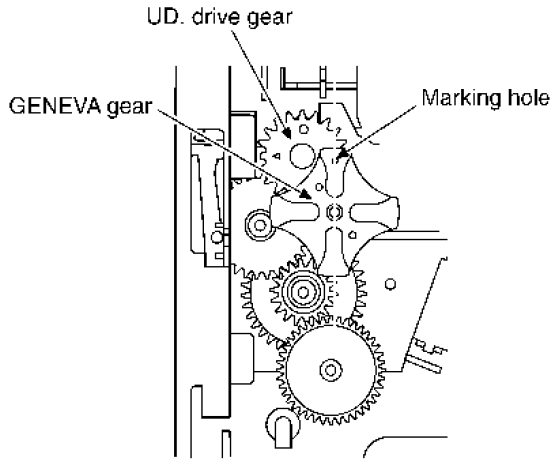



**(Step 12)**
Insert the UD. drive gear with its marking hole upward. At that time, its triangle mark should be sideways.

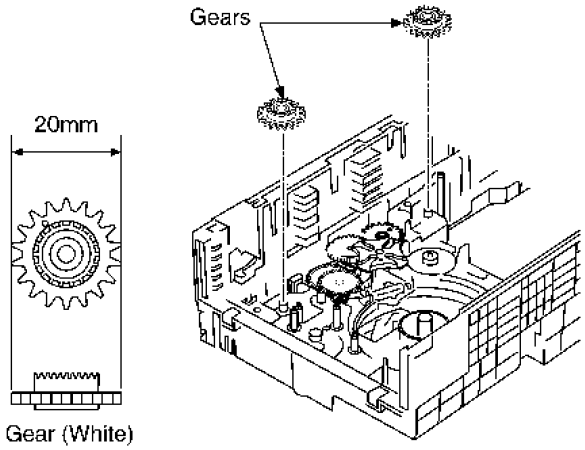



**(Step 13)**
Insert the GENEVA gear with its marking hole upward, and fix it by 2 hooks on bottom of mechanism base. At that time, UD. drive gear mustn't be moved.

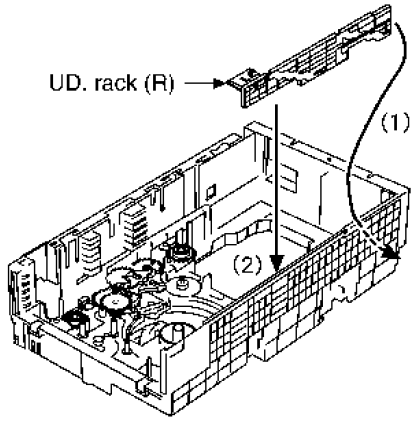




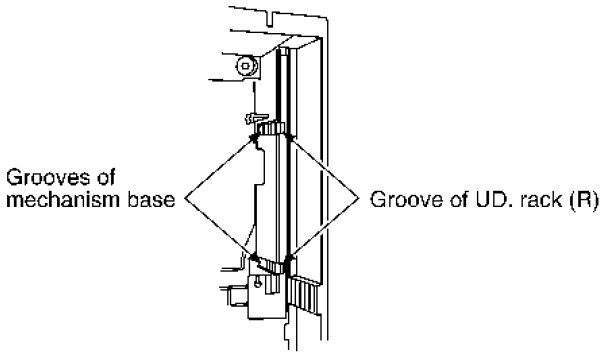

**(Step 14)**
Install the 2 gears to mechanism base.

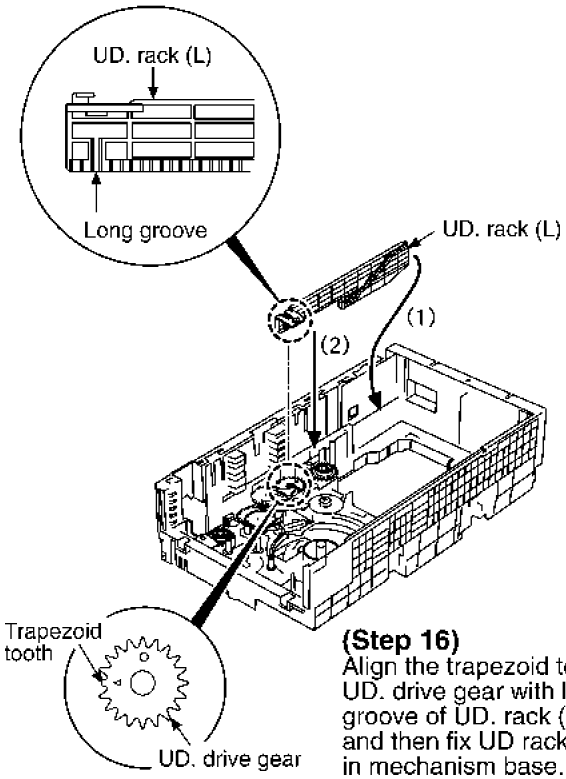



**(Step 15)**
Insert the UD. rack (R) to (2) from arrow (1).



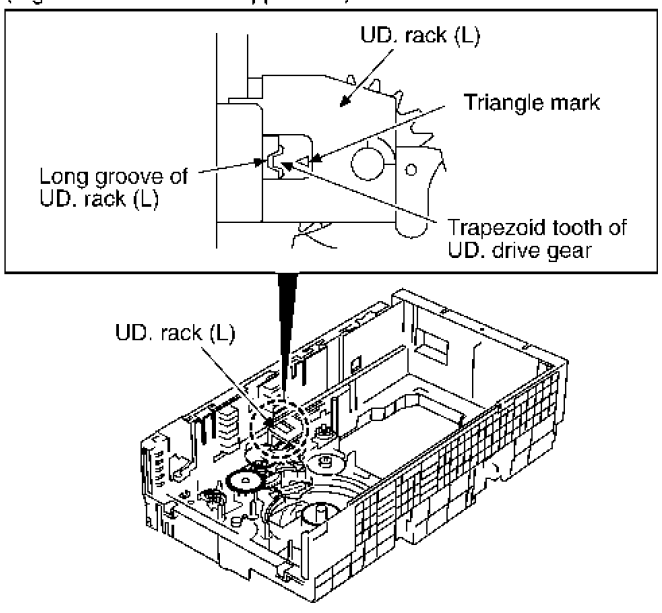

**NOTE:**
Put a groove of the mechanism base to the UD. rack (R).



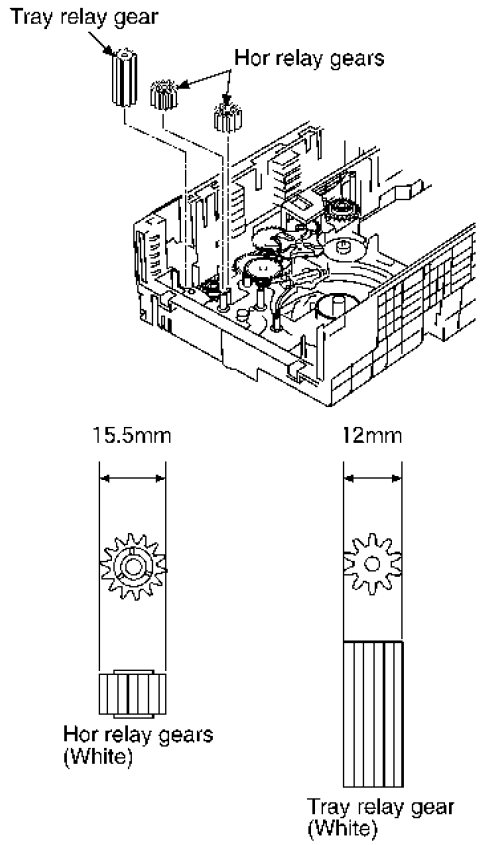




**(Step 16)**
Align the trapezoid tooth of UD. drive gear with long groove of UD. rack (L), and then fix UD rack (L) in mechanism base.

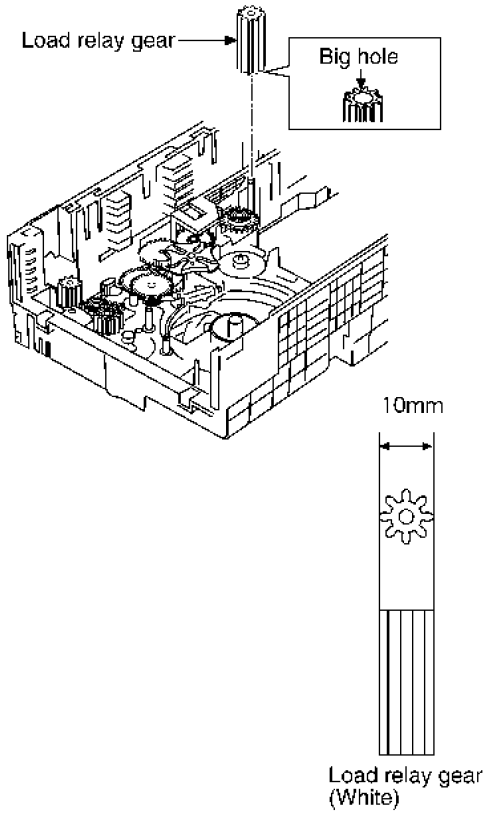
(Figure to see from the upper side)



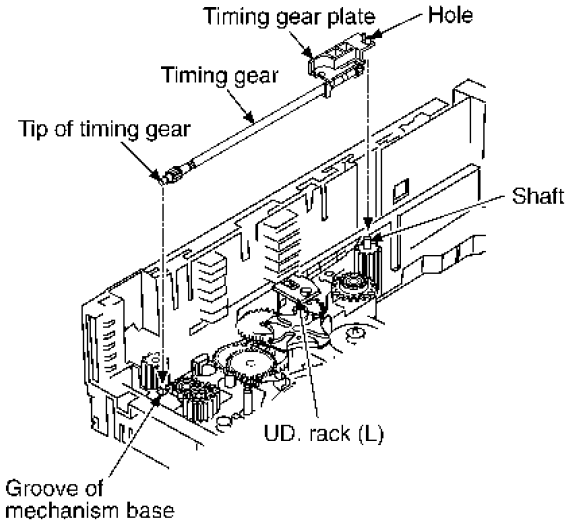
**(Step 17)**
Install the tray relay gear and 2 hor relay gears.



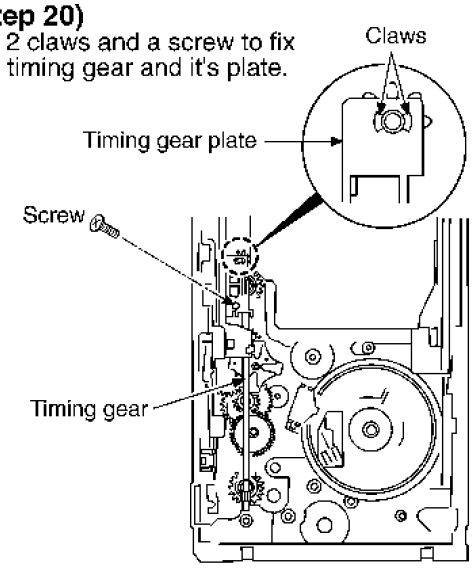

**(Step 18)**
Install the load relay gear to mechanism base.
(Fit load relay gear with its big hole downward.)



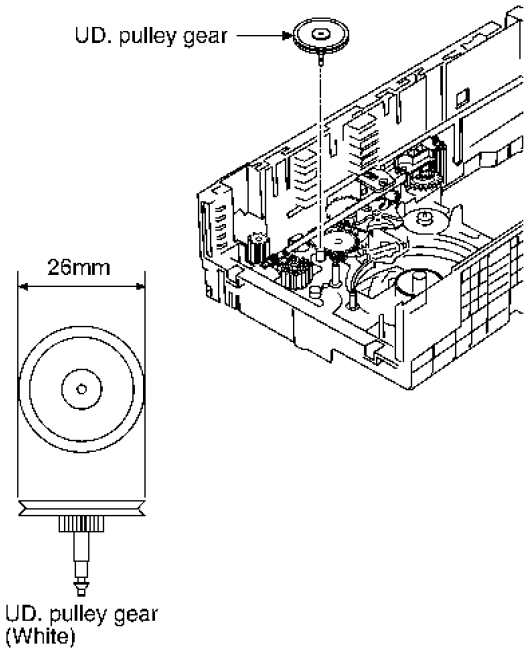

**(Step 19)**
Put on the top of the timing gear, then, install the timing gear and it's plate.
At that time avoid the UD. rack (L).



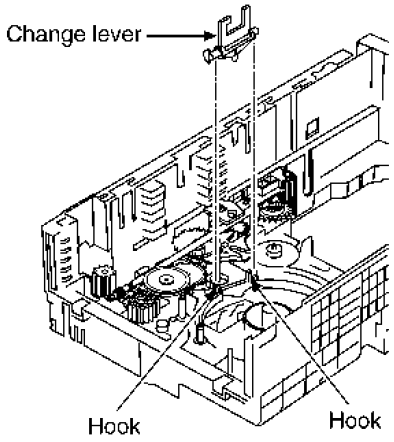

**(Step 20)**
Fix 2 claws and a screw to fix the timing gear and it's plate.



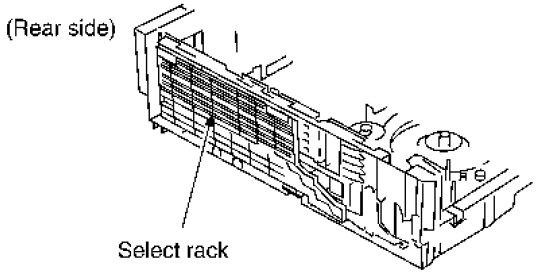
**(Step 21)**
Install the UD. pulley gear to mechanism base.

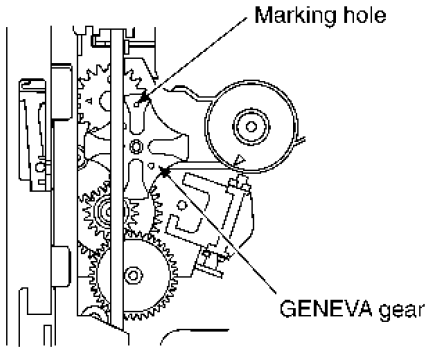



**(Step 22)**
Insert the change lever with it upright.

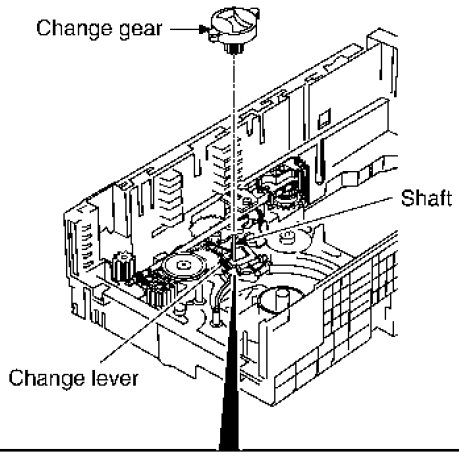



**(Step 23)**
Be sure the notice of bellow before fixing the change gear.
1. Select track should be in the rear of mechanism base.
2. Its hole of GENEVA gear should turn up.

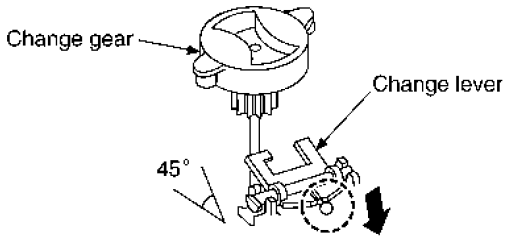


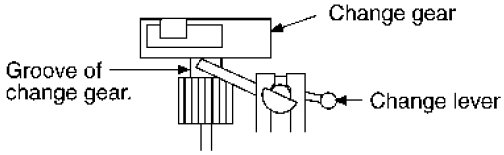

**(Step 24)**
Install the change gear as insert the change lever into the groove of change gear.




1. Pushing the ○ part and pull up the change lever 45°.

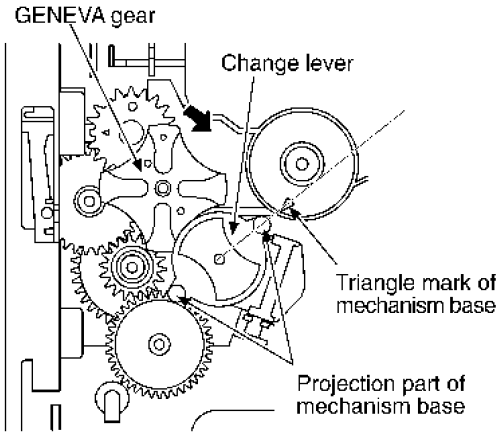



2. Insert the change lever into the groove of change gear.

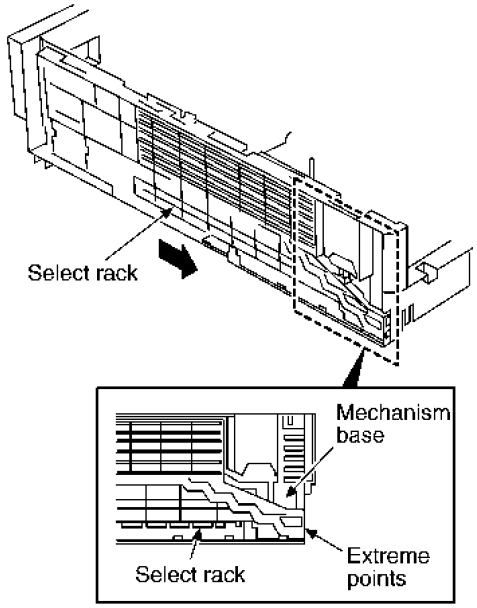


**(Step 25)**
Put change gear down with projection part of change gear fitted to triangle mark of mechanism base, when fixing change gear.
At that time, check change gear is inserted into the groove of change lever.

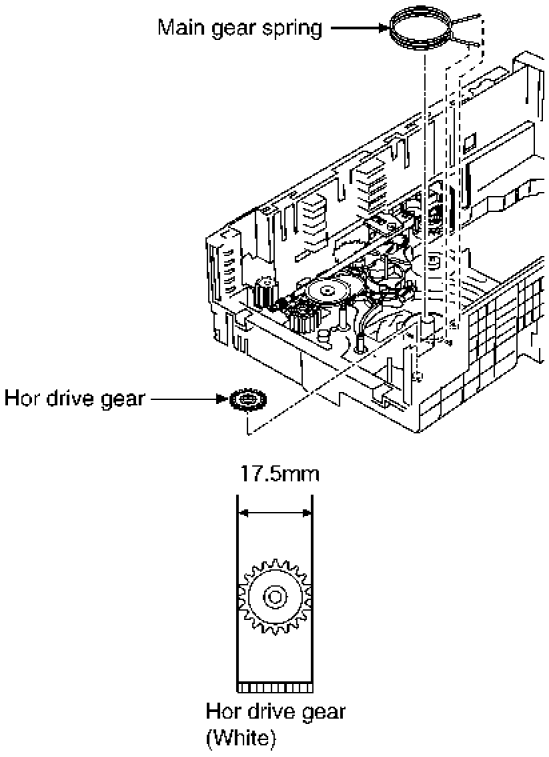
**(Step 26)**
Lastly, turn GENEVA gear clockwise slightly and drop change gear to mechanism base.



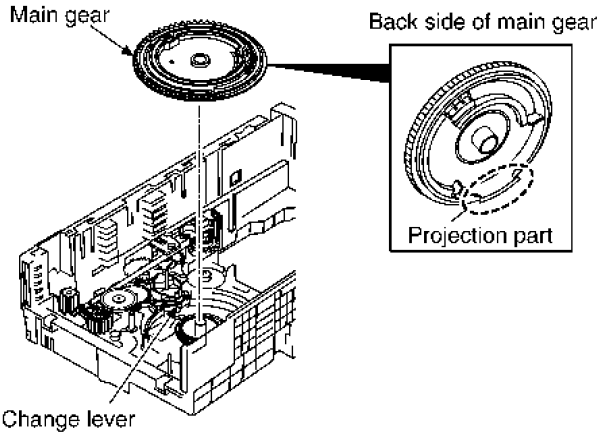

**(Step 27)**
Move the select rack smoothly forward manually until 2 extreme points of both select track and mechanism base.



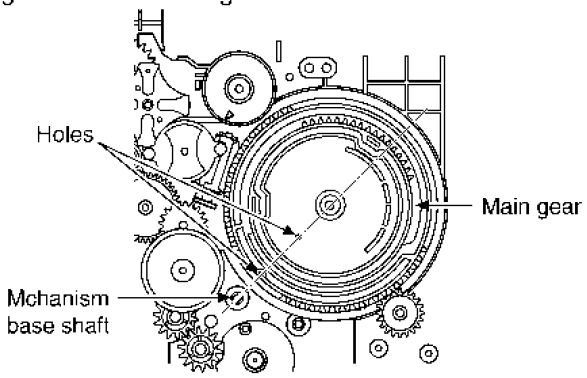

**(Step 28)**
Install the main gear spring and hor drive gear.



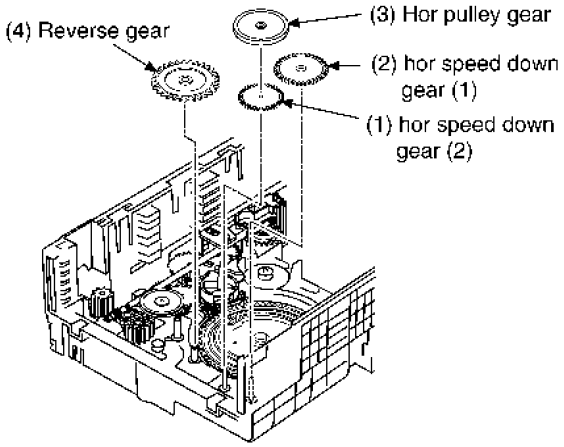

**(Step 29)**
Don't bring change lever into touch to projection part of main gear, when fixing main gear in mechanism base.

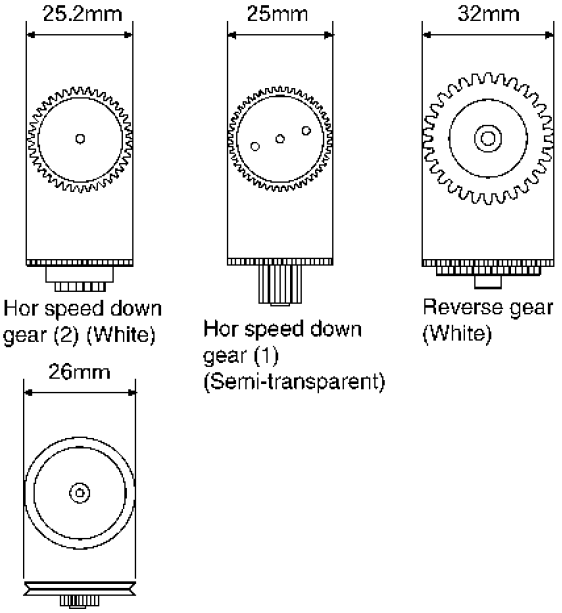



**(Step 30)**
After that, turn main gear so that 2 holes inside main gear would be in alignment with mechanism base.



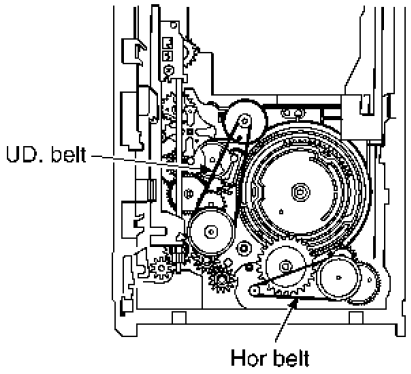
**(Step 31)**
Install the hor speed down gear (2), hor speed down gear (1), hor pullry gear and reverse gear.



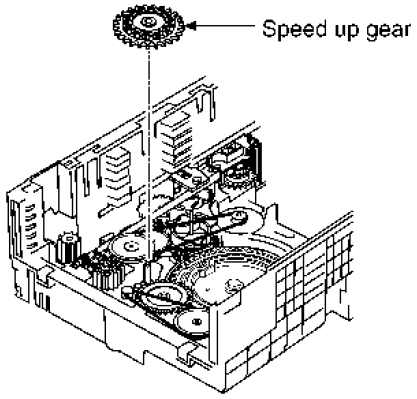



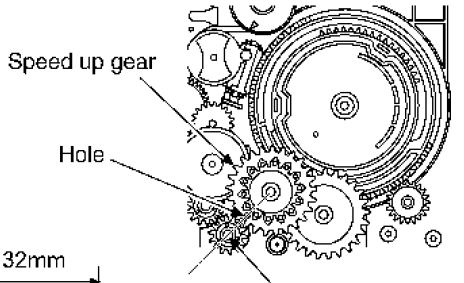

**(Step 32)**
Install the UD. belt and hor belt.

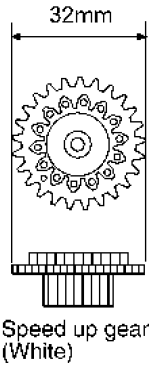
**NOTE:**
1. Take care not apply the grease to the belt.
2. Install the belt without twist.




**(Step 33)**
Install speed up gear to its shaft of mechanism base with 2 fitting.

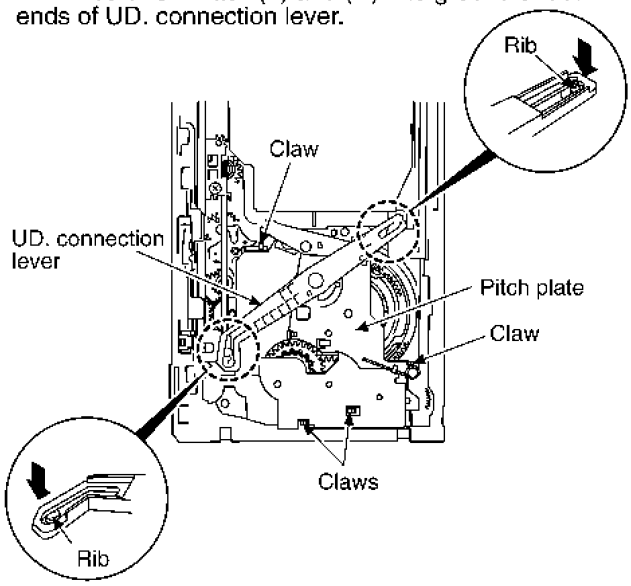


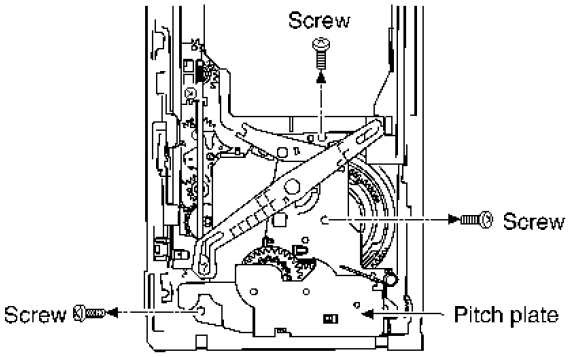




**(Step 34)**
Install the pitch plate. (The 4 claws should be latched.)

**(Step 35)**
Fix 2 ribs of UD. rack (L) and (R) into groove of both ends of UD. connection lever.

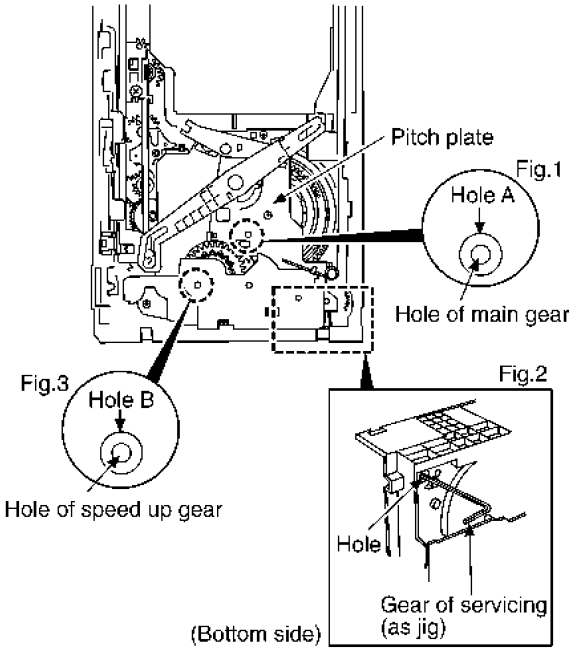


**(Step 36)**
Fixed it by three screws further.

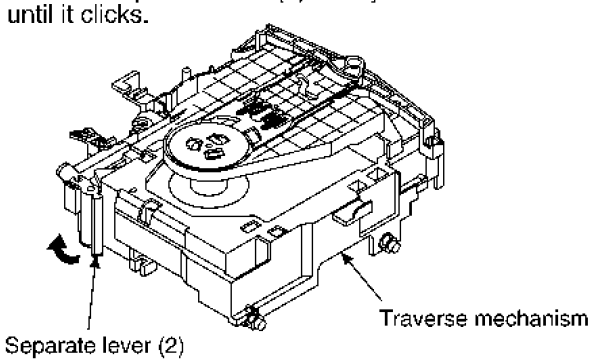



**(Step 37)**
Be sure the notice of below before fixing the traverse mechanism.

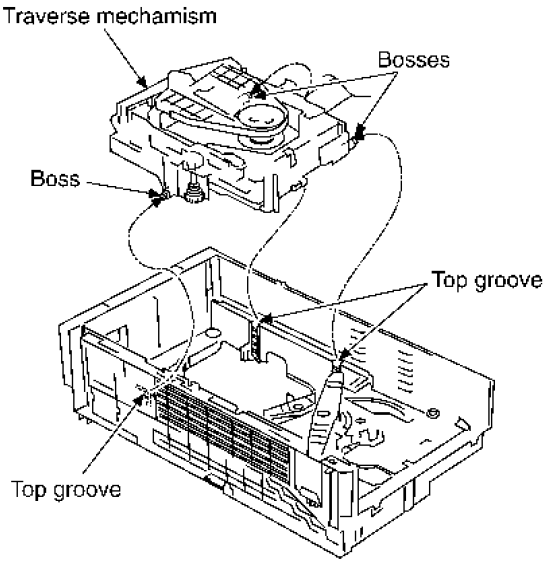
1. Check that 2 holes of both pitch plate and main gear is fitted. (Refer to Fig.1)
   If it's not fitted, put the gear for servicing in the hole of the bottom side and adjust it. (Refer to Fig.2)
2. Check that 2 holed of both pitch plate and speed up gear is futted. (Refer Fig.3)
   If it's not fitted turn the speed up gear to adjust it.



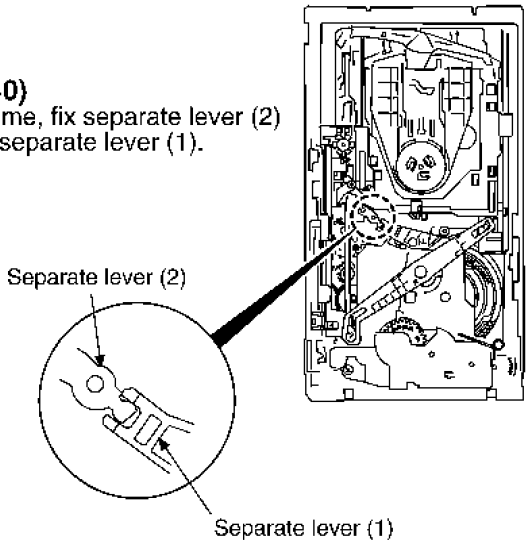

**(Step 38)**
Turn the separate lever (2) slowly toward left side until it clicks.




**(Step 39)**
Fix the left boss into the top groove of the UD. rack (L) and fix 2 bosses into the groove of the UD. rack (R).

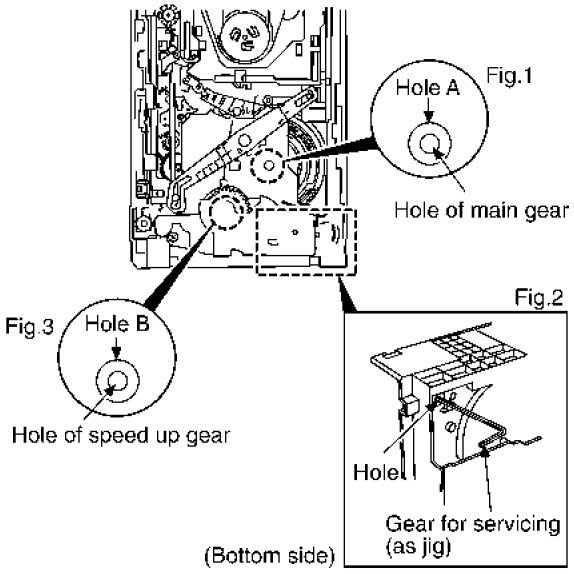



**(Step 40)**
At that time, fix separate lever (2) into the separate lever (1).

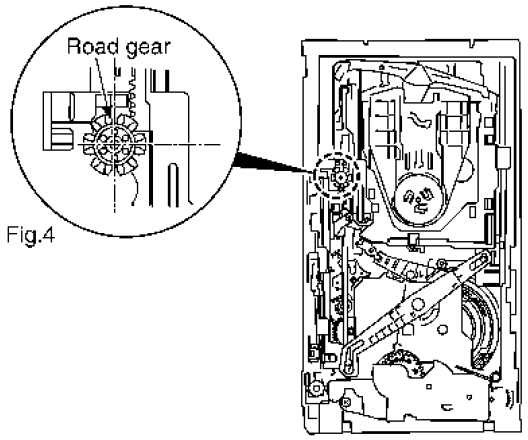


**(Step 41)**
After the traverse mechanism fixed,
confirm the phase in order below.

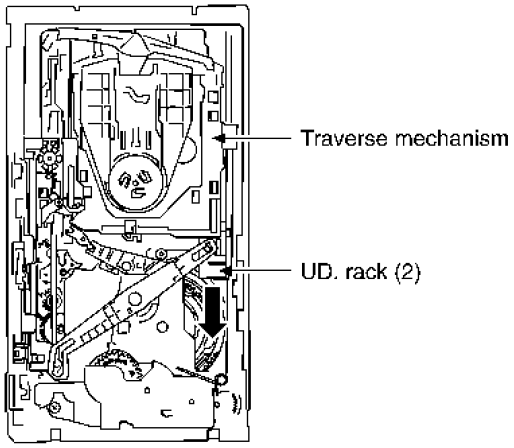
1. Check that 2 holes of both pitch plate and main gear is fitted. (Refer to Fig.1)
   If it's not fitted, put the gear for servicing in the hole of the bottom side and adjust it. (Refer to Fig.2)
2. Check that 2 holed of both pitch plate and speed up gear is futted. (Refer Fig.3)
   If it's not fitted turn the speed up gear to adjust it.




3. In the cog of road gear, the groove with it's cutting halfway set side ward. (Refer to Fig.4)
   Remove the traverse mechanism again when it is not set side ward and install it after adjustment of inserting position.
   NOTE: By this time, do not adjust to rotate the road gear.

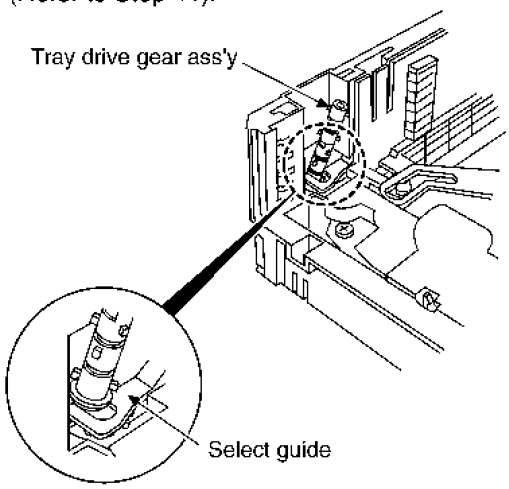


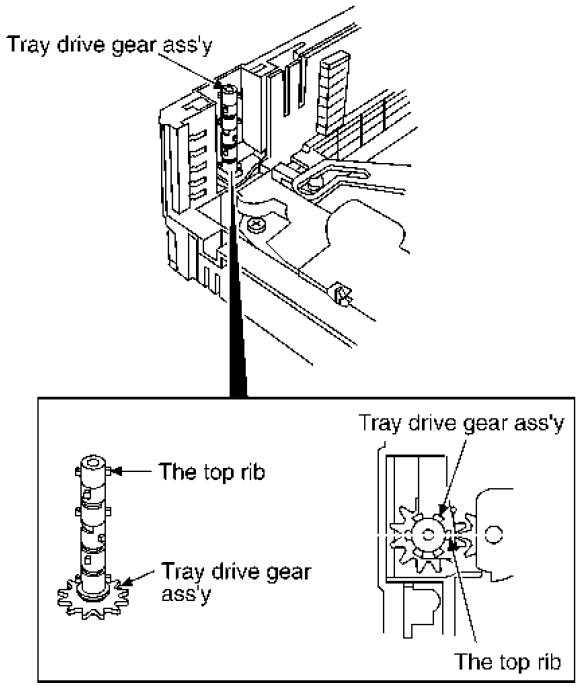

**(Step 42)**
After insertion of traverse mechanism, pull the UD. rack (R) on this side that each phase is "OK" and then lock the traverse mechanism.



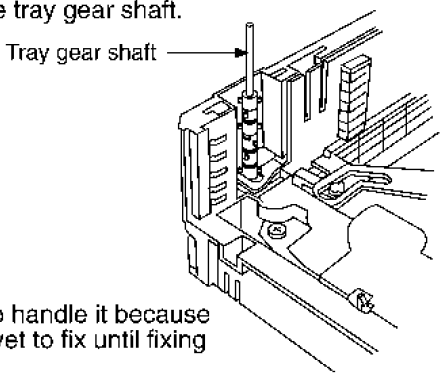

**(Step 43)**
Install the tray drive gear to select guide.
(Install the top rib of the tray drive gear with side ward.)

**NOTE:**
Confirm the each phase surely before install the tray drive gear. (Refer to Step 41).



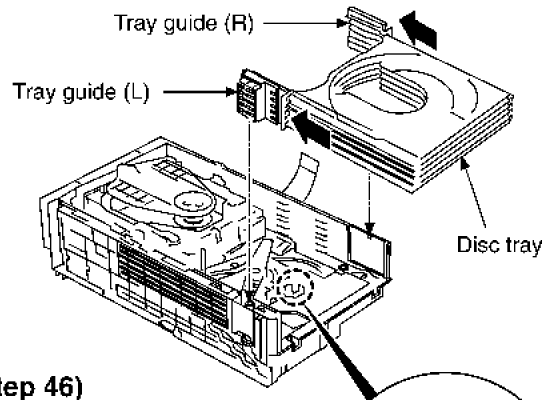



**(Step 44)**
Insert the tray gear shaft.

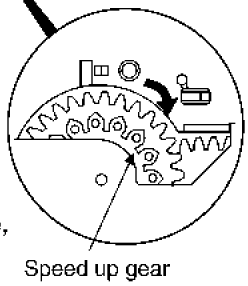



**NOTE:**
Be careful to handle it because the shaft is yet to fix until fixing top cover.

**(Step 45)**
Move the tray guide (R) and (L) to direction of arrow that fixed (stopped) it and install 5 pieces of disc tray.

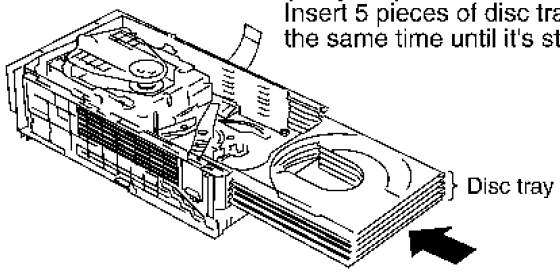



**(Step 46)**
Confirm that when the disc tray insert the upper side, the speed up gear is rotate clockwise a little.
- When the rotation of speed up gear is not clockwise or rotate, repeat from Step 45.
- Until the speed up gear rorate, repeat from Step 45 and 46.




**NOTE:**
While keeping all postion, install 5 pieces of disc tray.

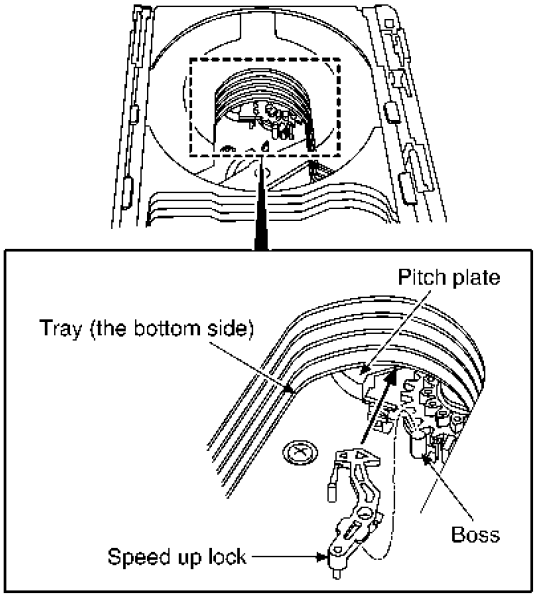
**(Step 47)**
Insert 5 pieces of disc tray at the same time until it's stop.



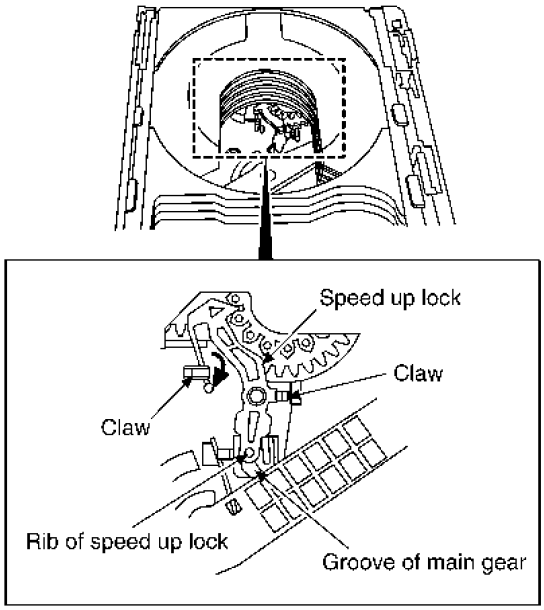
**(Step 48)**
Turn the traverse side 180°.

**(Step 49)**
While install the tip of speed up lock beween tray (No.1) of the most lower side and pitch plate for the time being.
(Do not to insert the cog of speed up gear), insert it to boss.

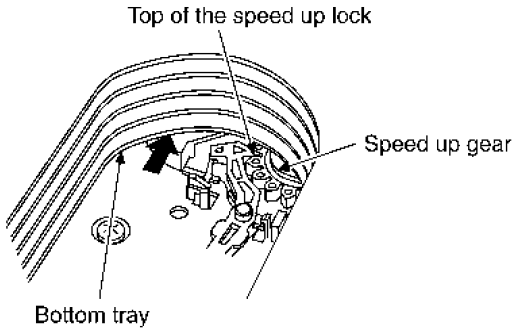
**NOTE:**
At that time, do not move the tray.
(See the tray the most front side)



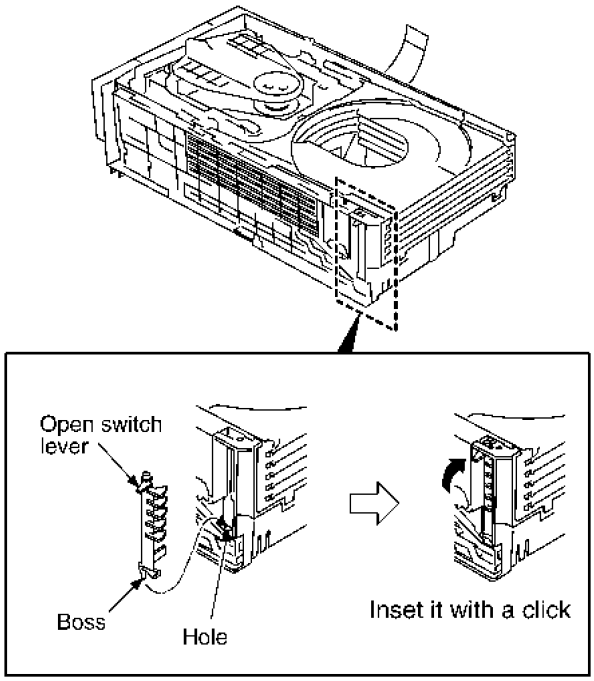

**(Step 50)**
Insert the rib of speed up lock into a groove of main gear, and lock it with 2 claws.




**(Step 51)**
Move the bottom tray to the arrow while pushing the top of the speed up gear. And insert it to a cog of the speed up gear.

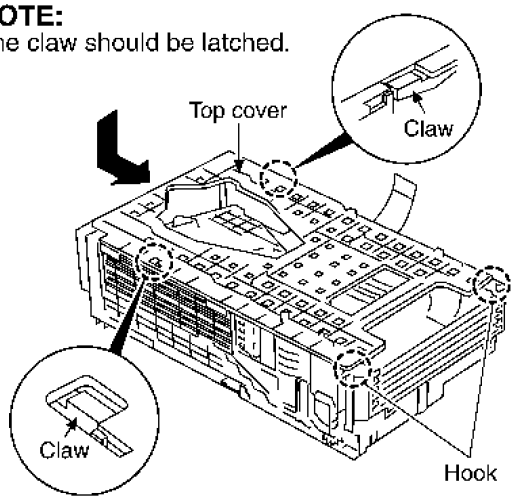



**(Step 52)**
Install the open switch lever.
(Put the boss into the hole of the mechanism base.)




**(Step 53)**
Install the top cover.
Fix it into hooks and slide direction to the arrow.

**NOTE:**
The claw should be latched.

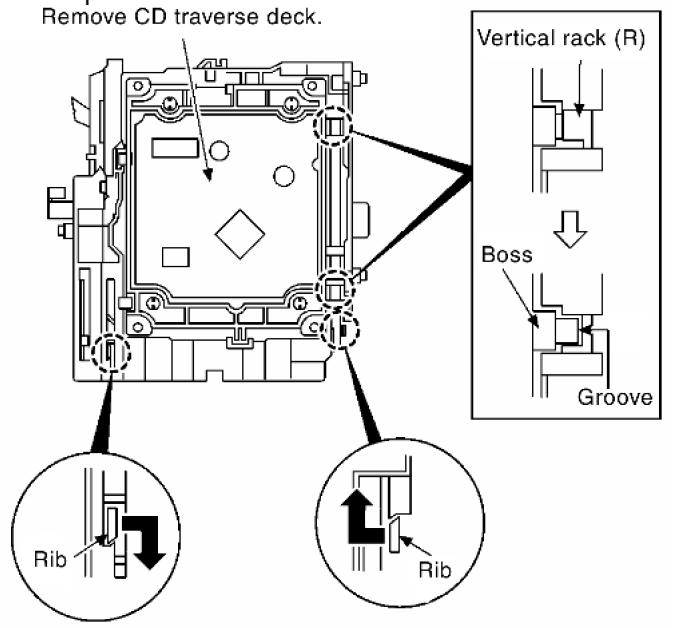


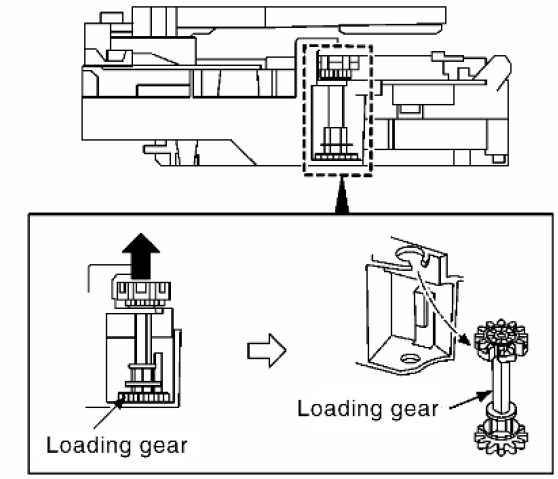
# 16.12. Disassembly of traverse mechanism

- Follow the (Step 1) - (Step 2) of Item 16.3.
- Follow the (Step 1) - (Step 2) of Item 16.4.
- Follow the (Step 1) - (Step 5) of Item 16.6.

Step 1
Shift ribs of both side to the arrow direction.
(A vertical rack (R) slides and groove opens)

Step 2
Remove CD traverse deck.

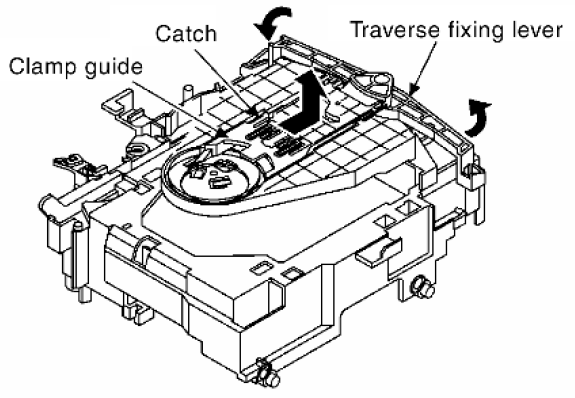


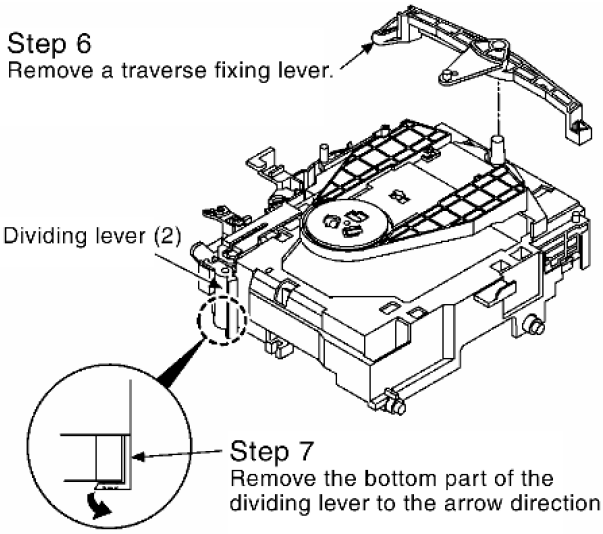

Step 3
Lift a loading gear slightly and pull out.

Step 4
Fixing lever to the arrow direction, rotate a traverse.

Step 5
Remove catch and take out a clamp guide.

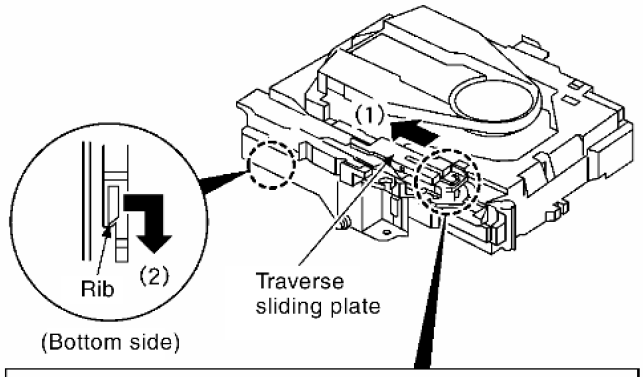



Step 6
Remove a traverse fixing lever.

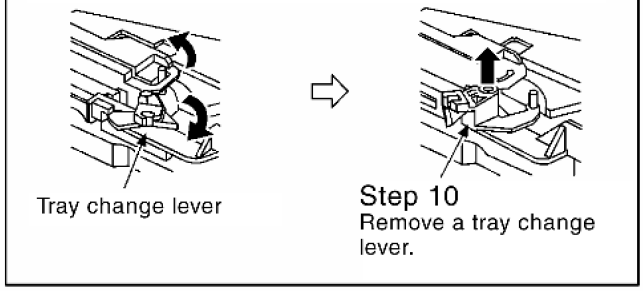



Step 7
Remove the bottom part of the dividing lever to the arrow direction.

Step 8
Slide a traverse sliding plate to the arrow direction (1), and shift a rib to the arrow direction (2).

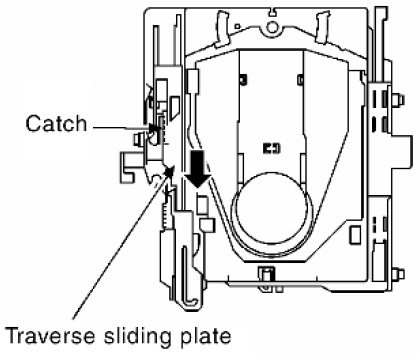



Step 9
Shifting a traverse sliding plate slightly and rotate a tray change lever.




Step 10
Remove a tray change lever.

Step 11
Holding the catch down, slide a traverse sliding plate to the arrow direction and remove it.




## 16.13. Removing the Cassette Tape Manually

When electrical system failure occurs and a loaded cassette tape is stuck in the unit, follow the instruction below to remove it.

### 16.13.1. Removal by Compulsory Loading

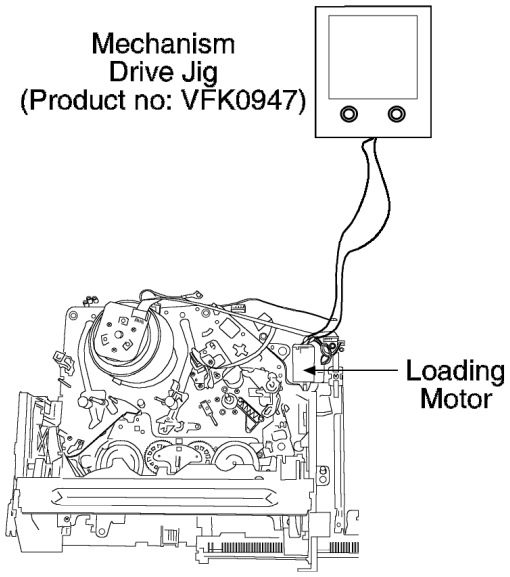
(Available when service mode is on even when the power cannot be turned off.)

1. Press and hold down the "FF" and "EJECT" buttons at least three seconds then adjust the service number until appears as "7".
2. Press the "STOP" button to unload.
   (Carefully check for tape slack)

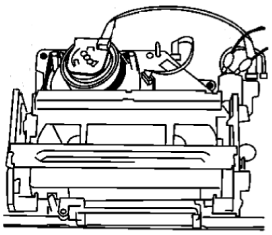
| | | | | |
|---|---|---|---|---|
| Service mode display | 7 06 ＊＊ | ⟶ | 7 0L ＊＊ |
| Casssttе tape position | (STOP) | | (EJECT) |

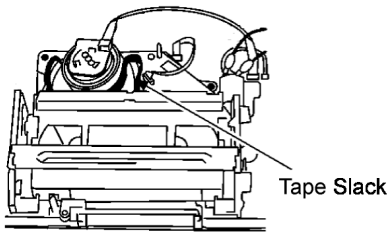
### 16.13.2. Removal by Use of Battery to Rotate Loading Motor

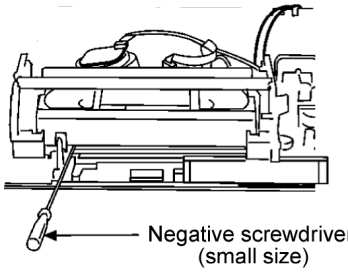
1. Unplug the power outlet, and remove the top panel and the front panel.
2. Use a mechanism drive jig (or three AA-size batteries connected in series) in order to supply 4.5V and to rotate the loading motor.



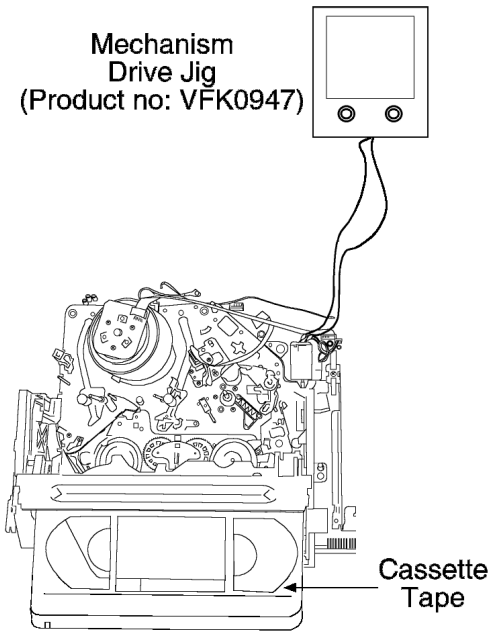

3. Suspend the unloading operation right before completion. Rotate the S-reel board with a negative screwdriver (small size) to remove tape slack.





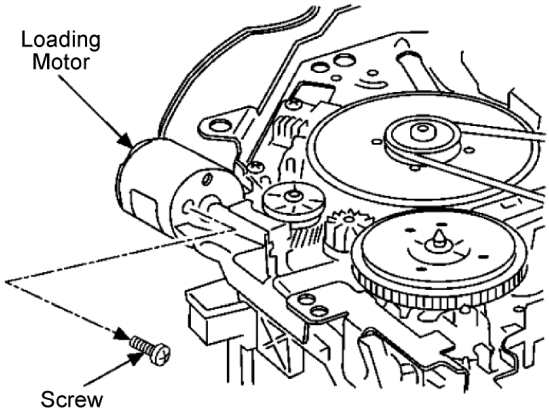




4. Restart the unloading operation to remove the cassette tape.

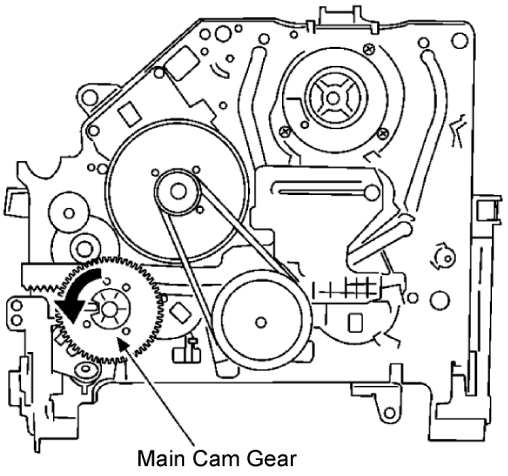



## 16.13.3. Removal of Mecha Unit then take out Cassette Tape

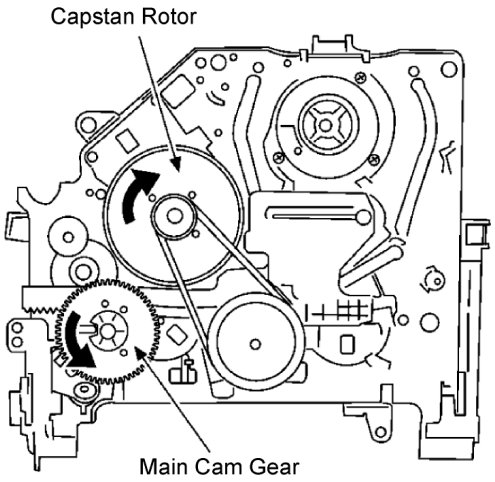
1. Unplug the power outlet and remove the top panel and the front panel.
2. Remove the VTR mechanism unit.
3. Remove the loading motor (remove a screw).




4. Rotate the main cam gear counterclockwise, and suspend the unloading operation right before completion.




5. Rotate the capstan rotor clockwise in order to remove tape slack. Rotate the main cam gear counterclockwise again and remove the cassette tape.



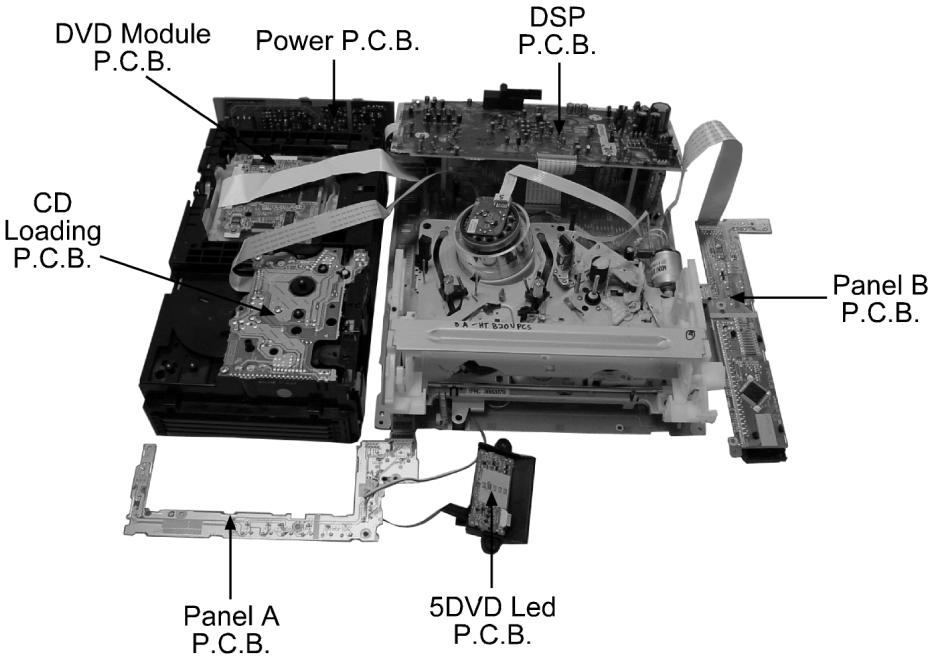

6. Reassemble the loading motor and the mechanical unit to the Main P.C.B. and securely fasten with the screws.
   (Refer to "Precaution to Be Taken During Installation of Traverse Deck Unit".)

# 17 Procedure for checking of the major P.C.B.

## 17.1. Checking the DVD Module P.C.B., DSP P.C.B., Power P.C.B., CD Loading P.C.B., Panel A P.C.B., Panel B P.C.B. and 5DVD Led P.C.B.

**Preparation**

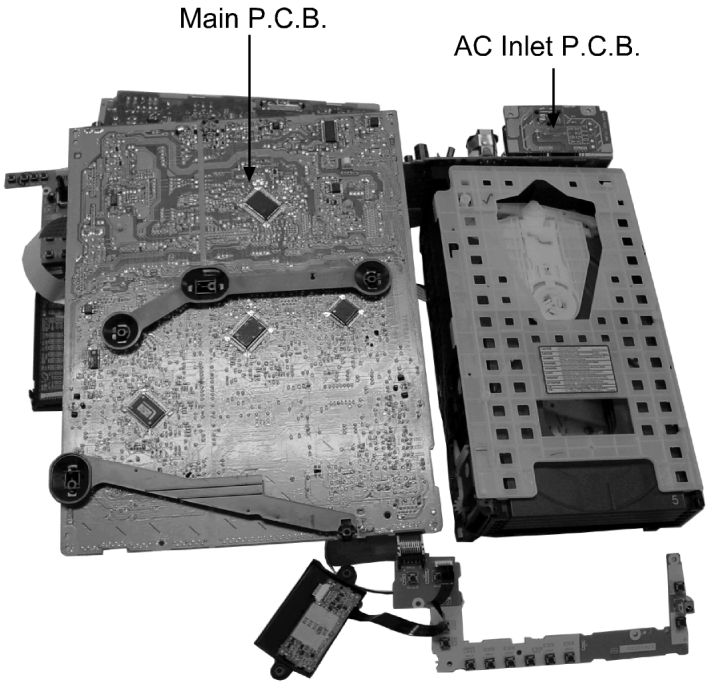
Follow items 16.1 to 16.7 of Disassembly Procedure (Refer to below diagram for service position 1).




## 17.2. Checking Main P.C.B. & AC Inlet P.C.B.

**Preparation**

Follow items 16.1 to 16.7 of Disassembly Procedure (Refer to below diagram for service position 2).

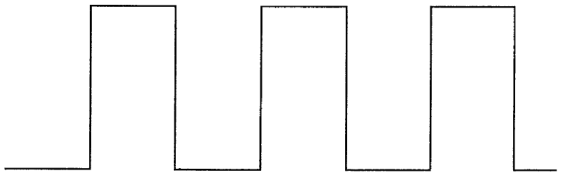


# 18 Waveform Chart

## 18.1. Preparation Items

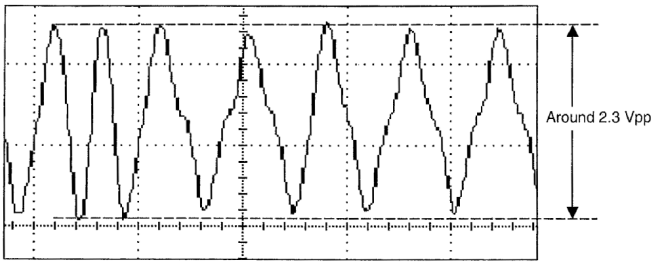
1. Test disc DVDT-S20
2. Video Analyzer
3. Digital Oscilloscope
4. RGB Encoder

Head Switch Point (Cylinder operation check)



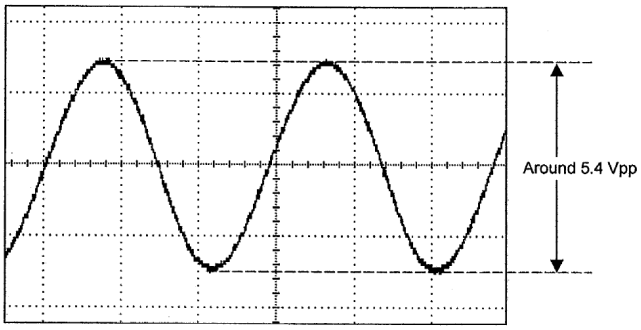
Head Switch pulse frequency is around 30Hz
Measurement pt : TW2001
(Precaution : Connect DD cylinder to P2501)

Video Recording (Record Y/C O/P)



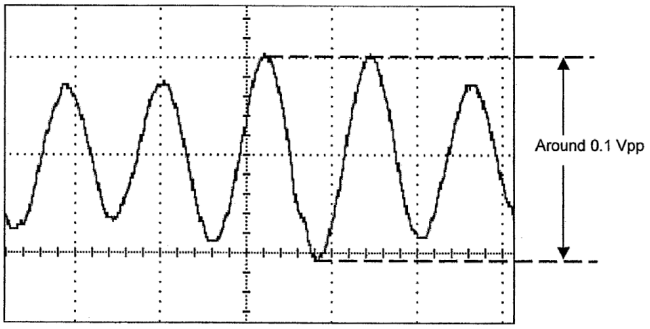

Measurement pt : pin 5 (P5001)
(Precaution : Set probe to 10:1)

Audio Rec Level (Normal)




Measurement pt : pin 4 (P4002)
(Precaution : Set probe to 10:1)
Frequency Level : 68 kHz

Audio Rec Level (HIFI)




Measurement pt : pin 9 (P5001)
(Precaution : Set probe to 10:1)

### 18.1.1. Procedures

1. Enable test mode ‘AC 01 EA’
2. Select ‘TUNER’ using R/C & press ‘FF search’ to change from VCR to DVD mode.
3. Play DVDT S20 test disc (T9)

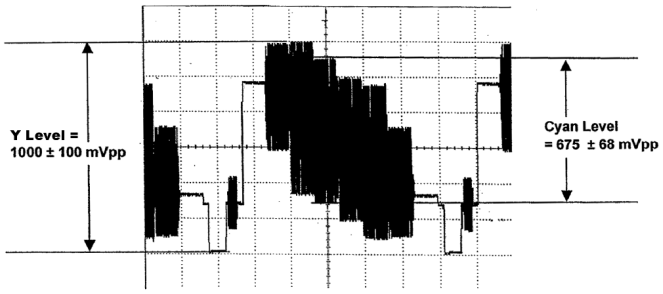
**Note :**

There should not be any abnormality on picture such as color dim or color too bright.

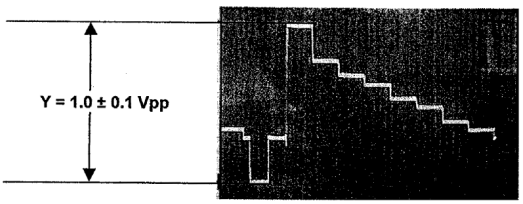
**Precaution :**

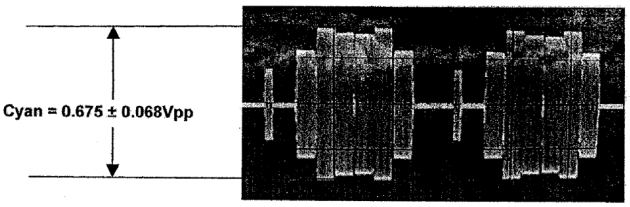
RGB component O/P should be 75Ω termination.

## Video Output Level

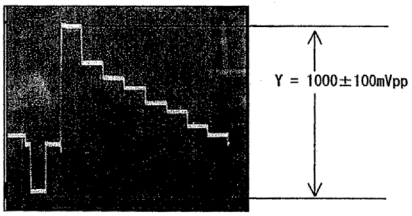


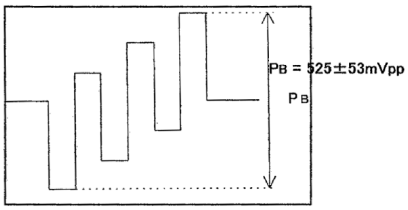

## S-Video O/P Level

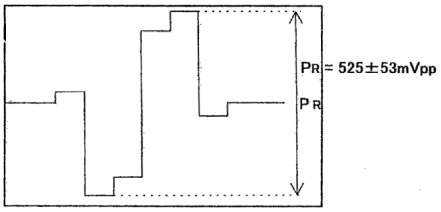



## RGB Component Output



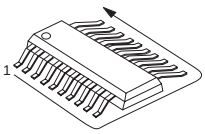



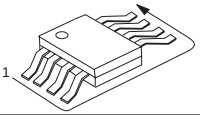
# 19 Illustration of IC's, Transistors and Diodes

C0JBAR000326 (16p)
C0GBF0000004 (16p)
C9ZB00000431 (34p)
KIA4558FEL (8 p)
C3ABPG000067 (54p)
C1BB00000782 (42p)
C1BB00000389 (24p)
C0JBAS000008 (14p)

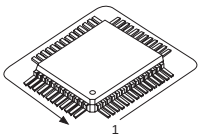
C0ABCB000040 (14p)
C1AB00001472 (28p)



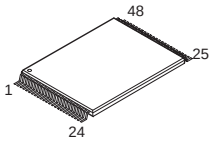

C1AB00001192 (8p)
C0DBCHD00002 (6p)
C0CBCBD00018 (8p)
C3EBGC000044 (8p)
C3EBCG000043 (8p)



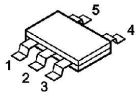

C2HBZC000013 (80p)
C0HBB0000039 (64p)
C0FBBK000036 (48p)
MN2DS0003APH (256p)
C2CBJG000414 (100p)
C2CBHF000342 (100p)
C1AB00001838 (100p)
AN3663FBP-AV (64p)



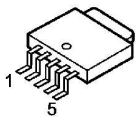

C3FBMD000134



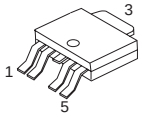

C0EBH0000172
C0EBA0000031
C0JBCA000066



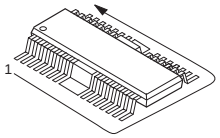

C0DBZHG00013
C0DBEKG00003




C0DBZJG00005




C0GBG0000044 (28p)
C1AB00001479 (25p)

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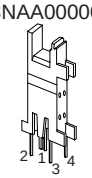
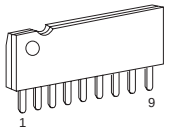
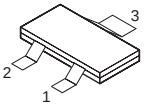


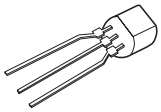

C0GAG0000007




C0EBE0000384




C0DAEJC00003



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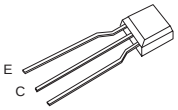
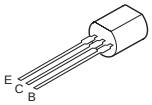



2SB621ARSTA

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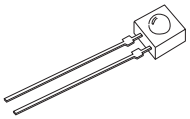

KTD1304TA
KRA110STA
KRC103STA
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2SB09700RL
2SB0710A0L
2SD0602A0L
UNR221500L
UNR211700L

B1GDCFJJ0002
B1ADCF000001
B1ABCF000011
KTC3875GRTA
2SD1819A0L
UNR521200L
UNR521100L
UNR221300L
UNR211100L

2SD114900L
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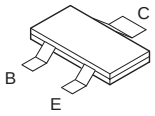


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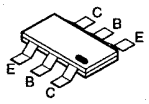


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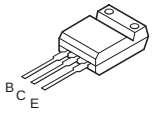
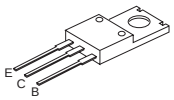
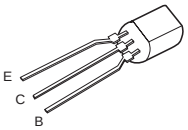


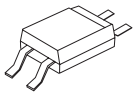

KTA1046
KTC2026



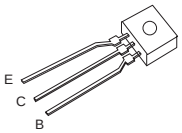

B1AAGD000006




B3PBA0000078



2SC3311ASA

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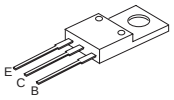


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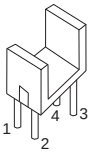


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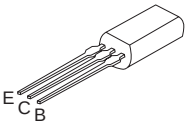
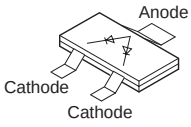
2SC3940AHA




B0ADCC000002

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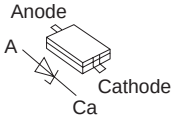


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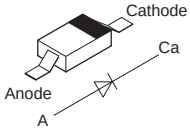


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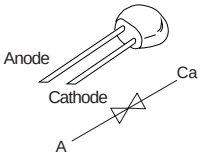


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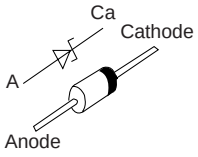


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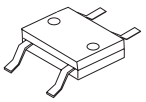
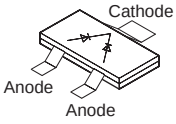
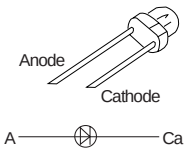


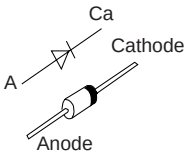
B0ADCJ000020



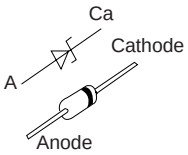

B3EA00000072



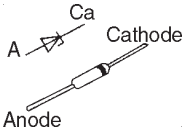

B0EAKM000117
B0JAPE000008
B0HAGM000006
B0JAMK000015
B0JAME000037
B0JAME000025
MAZ751000C
RL1N4003S-P



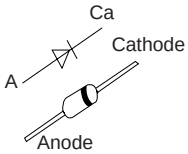

MAZ4240NMF
MAZ40360MF
MAZ4075NHF
MAZ4300NMF
MAZ4062NLF
MAZ4056NHF
MAZ4130NLF



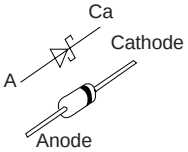

B0BA7R900004
B0BA9R000007



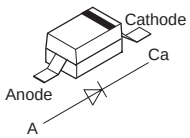

MA2J72800L
B0AAED000003
MA2C165001VT
MA2C18500E
B0JACE000001



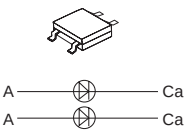

MA2C700A0F




B0JCME000012

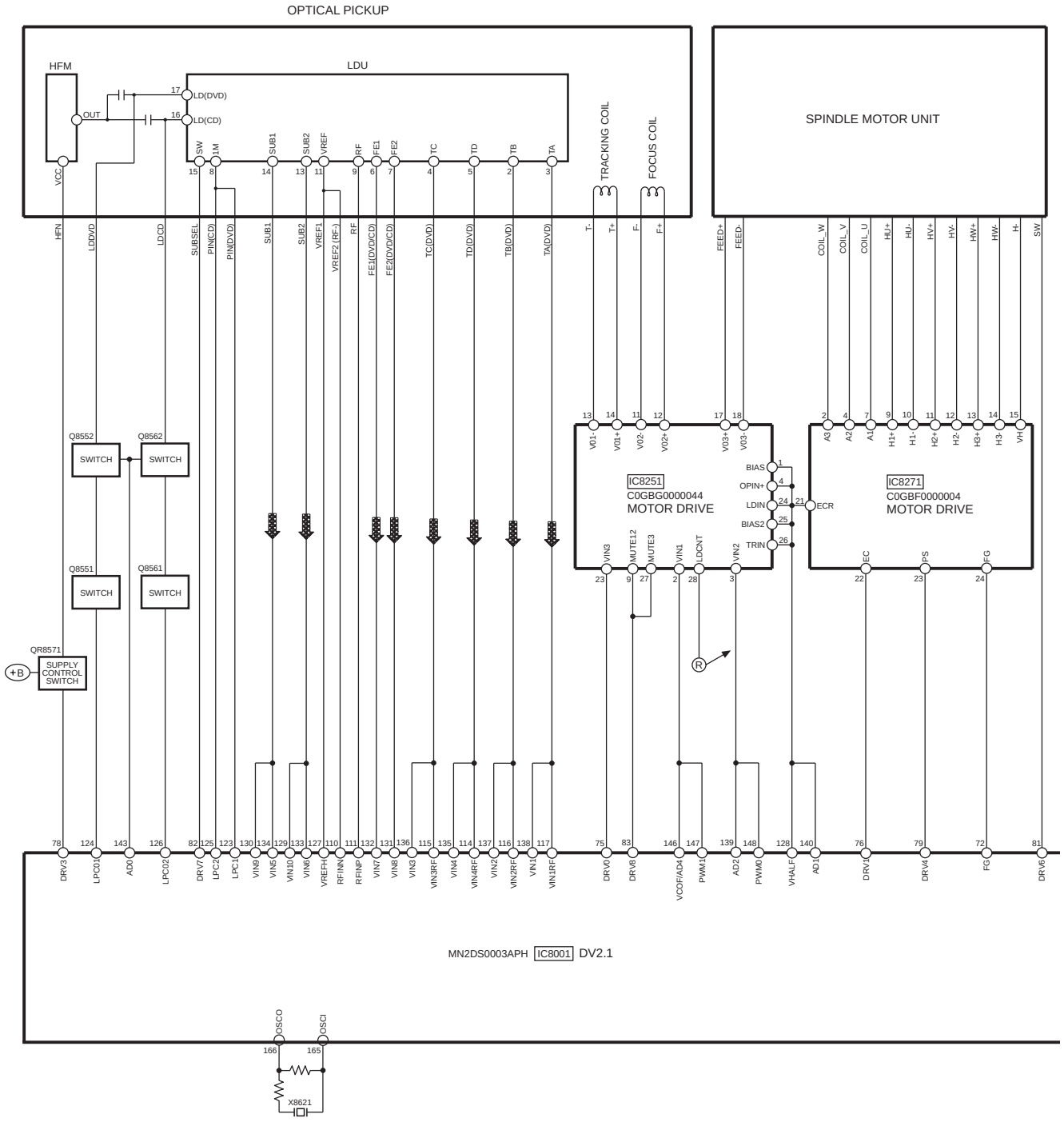


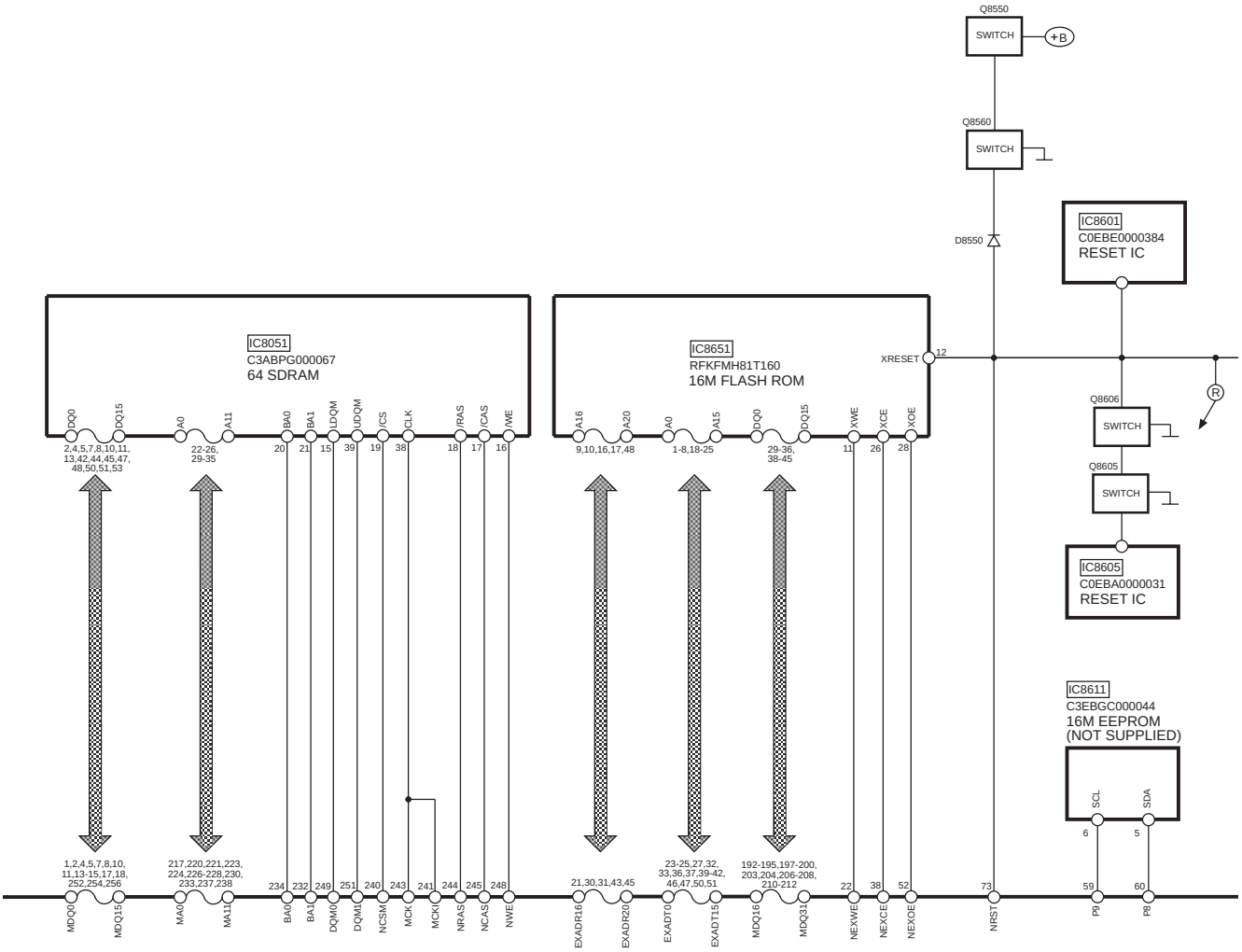

B3AKB0000016



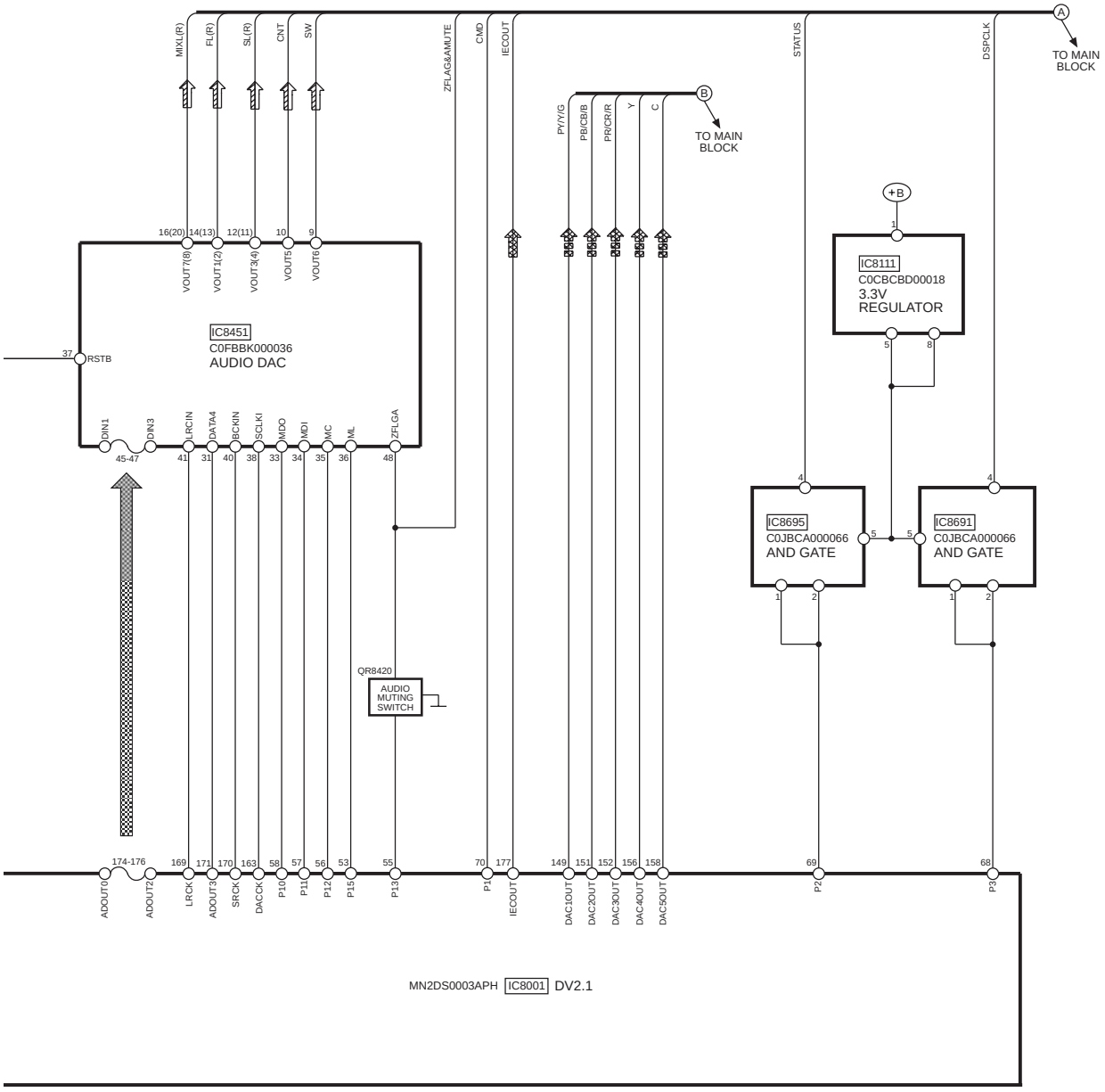
# 20 Block Diagram

## 20.1. DVD Module Block

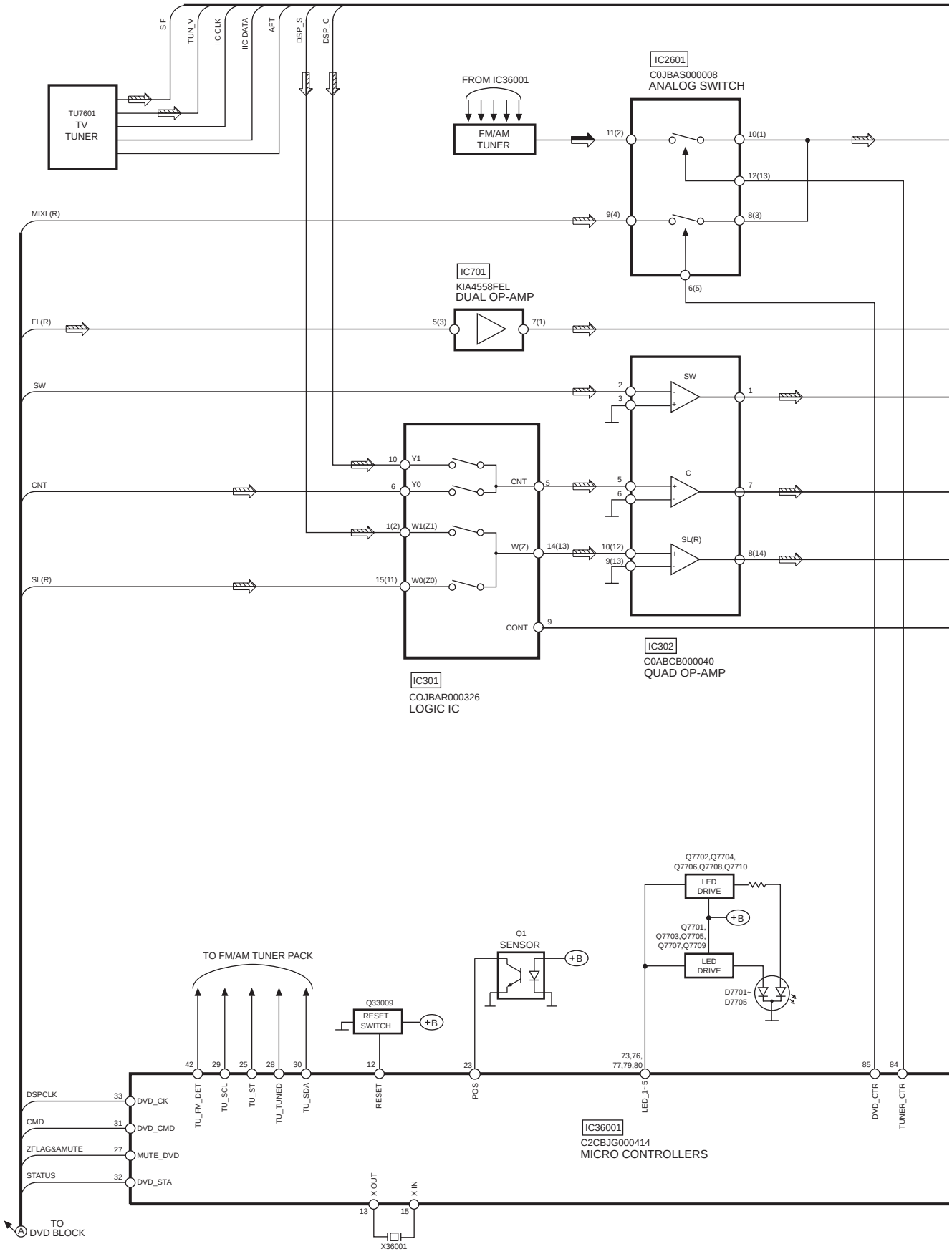


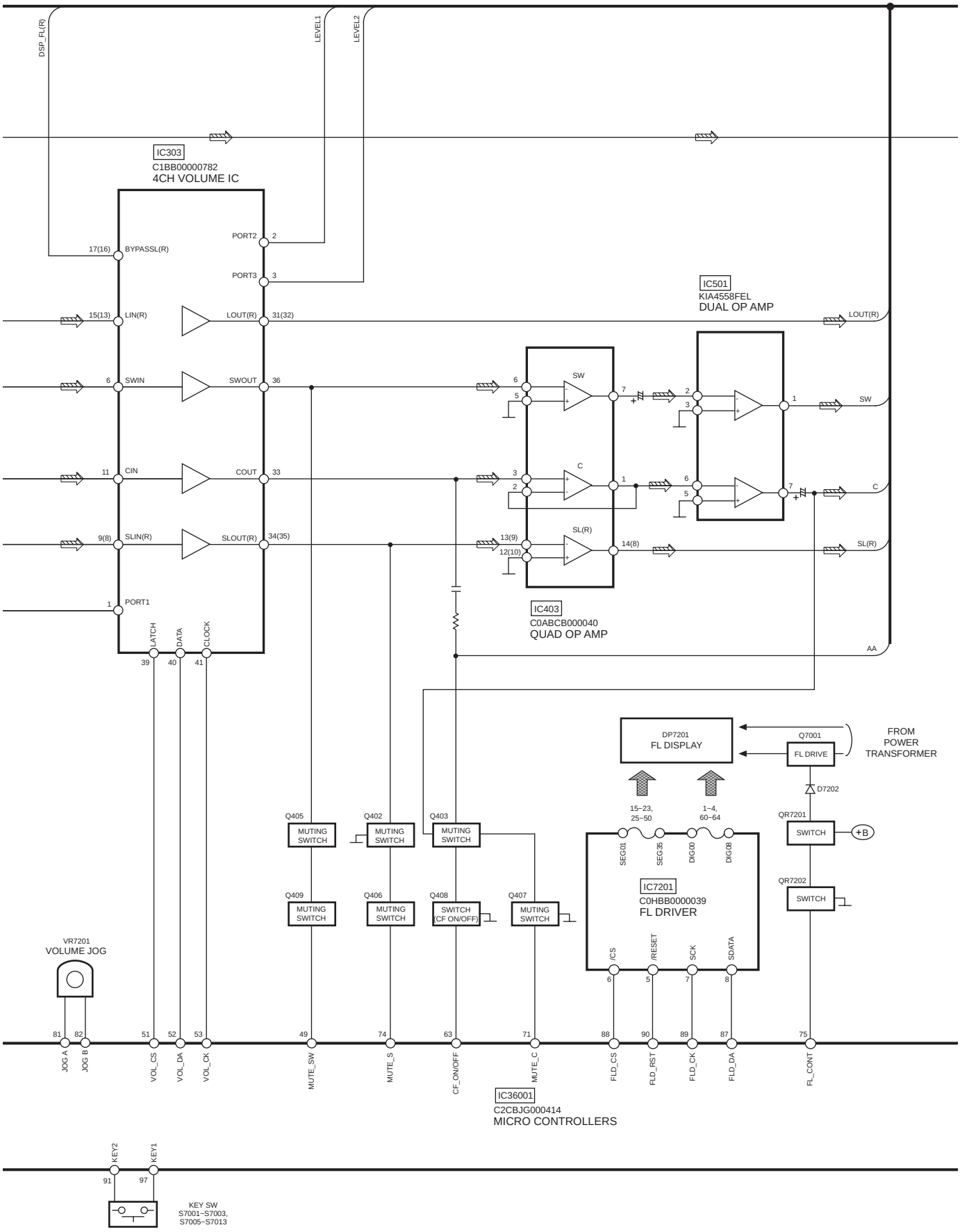


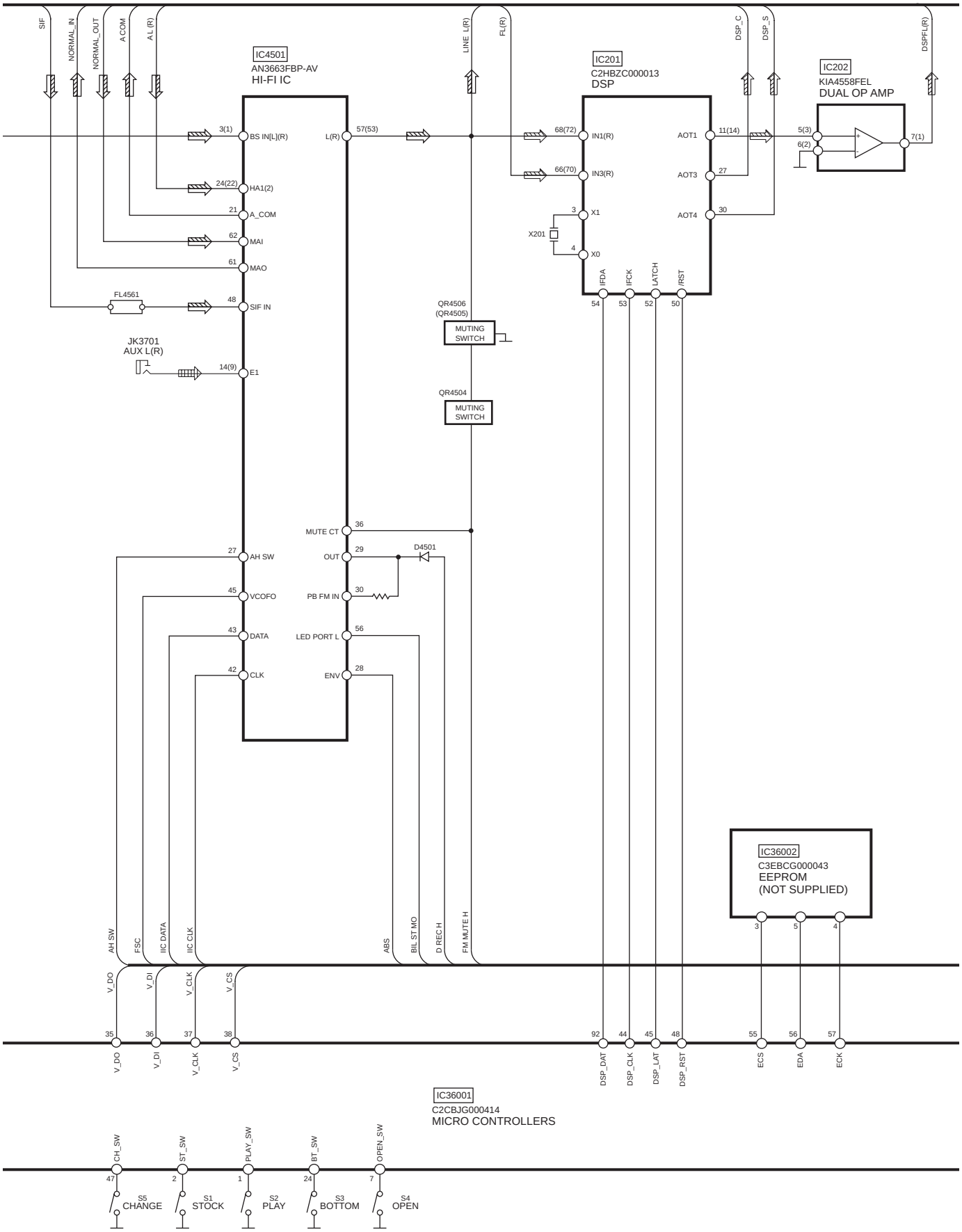

MN2DS0003APH IC8001 DV2.1

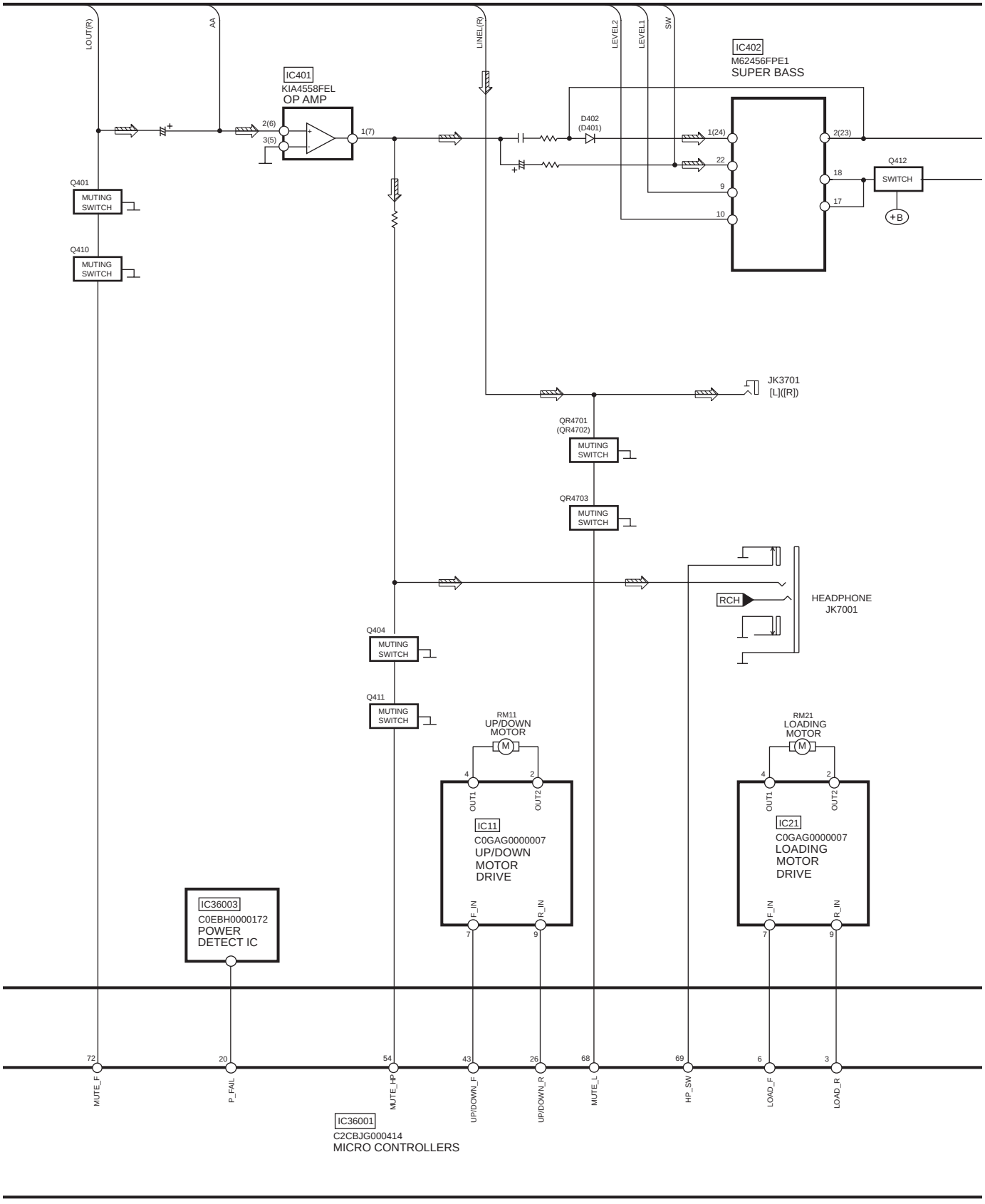

MIXL(R)
FL(R)
SL(R)
CNT
SW
ZFLAG&AMUTE
CMD
IECOUT
PY/Y/G
PB/CB/B
PR/CR/R
Y
C
STATUS
DSPCLK
A
TO MAIN BLOCK
B
TO MAIN BLOCK
+B
IC8111
C0CBCBD00018
3.3V
REGULATOR
IC8451
C0FBBK000036
AUDIO DAC
RSTB
DIN1
DIN3
LRCIN
DATA4
BCKIN
SCLKI
MDO
MDI
MC
ML
ZFLGA
IC8695
C0JBCA000066
AND GATE
IC8691
C0JBCA000066
AND GATE
QR8420
AUDIO MUTING SWITCH
ADOUT0
ADOUT2
LRCK
ADOUT3
SRCK
DACCK
P10
P11
P12
P15
P13
P1
IECOUT
DAC1OUT
DAC2OUT
DAC3OUT
DAC4OUT
DAC5OUT
P2
P3
MN2DS0003APH IC8001 DV2.1

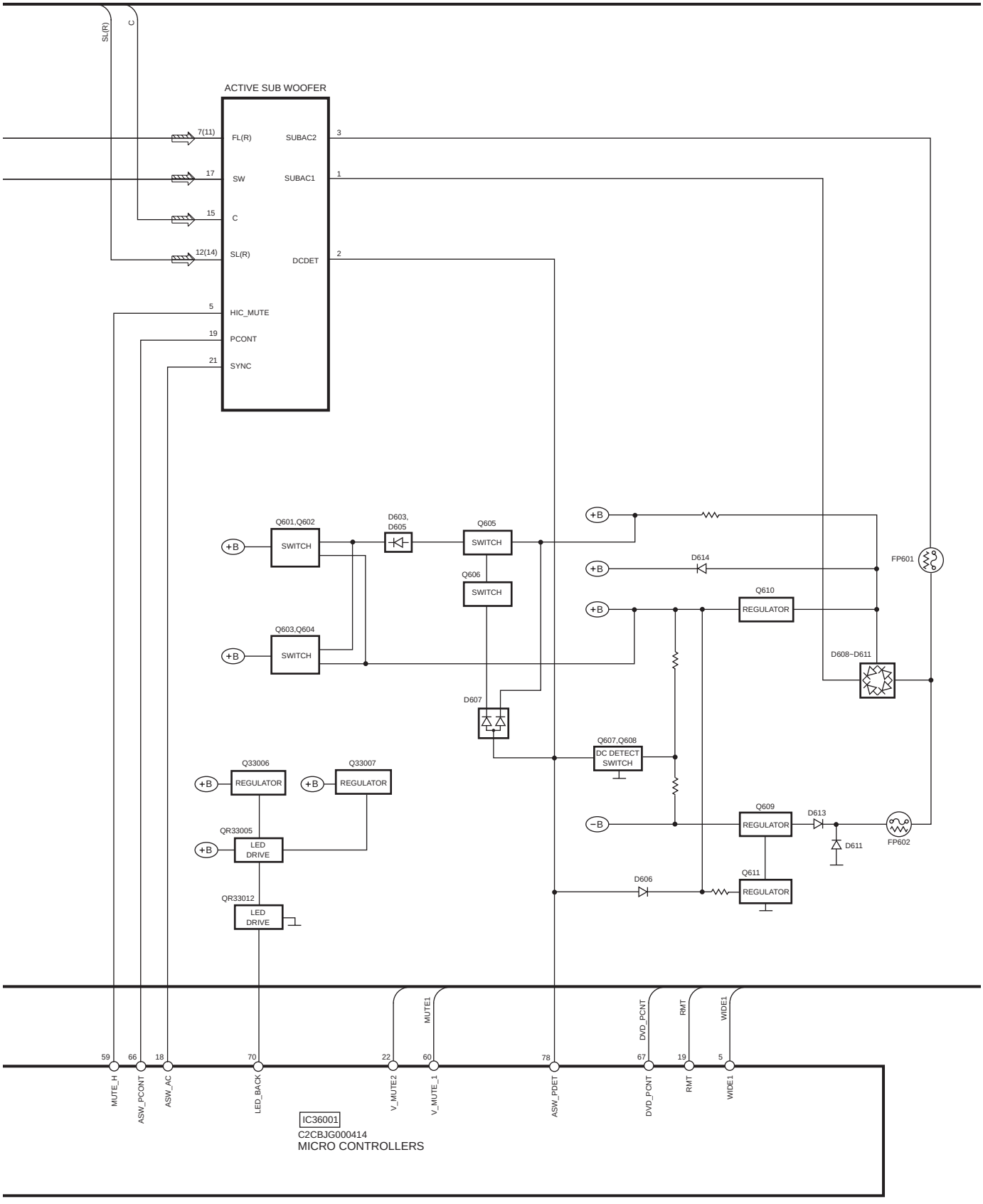
# 20.2. Main Block

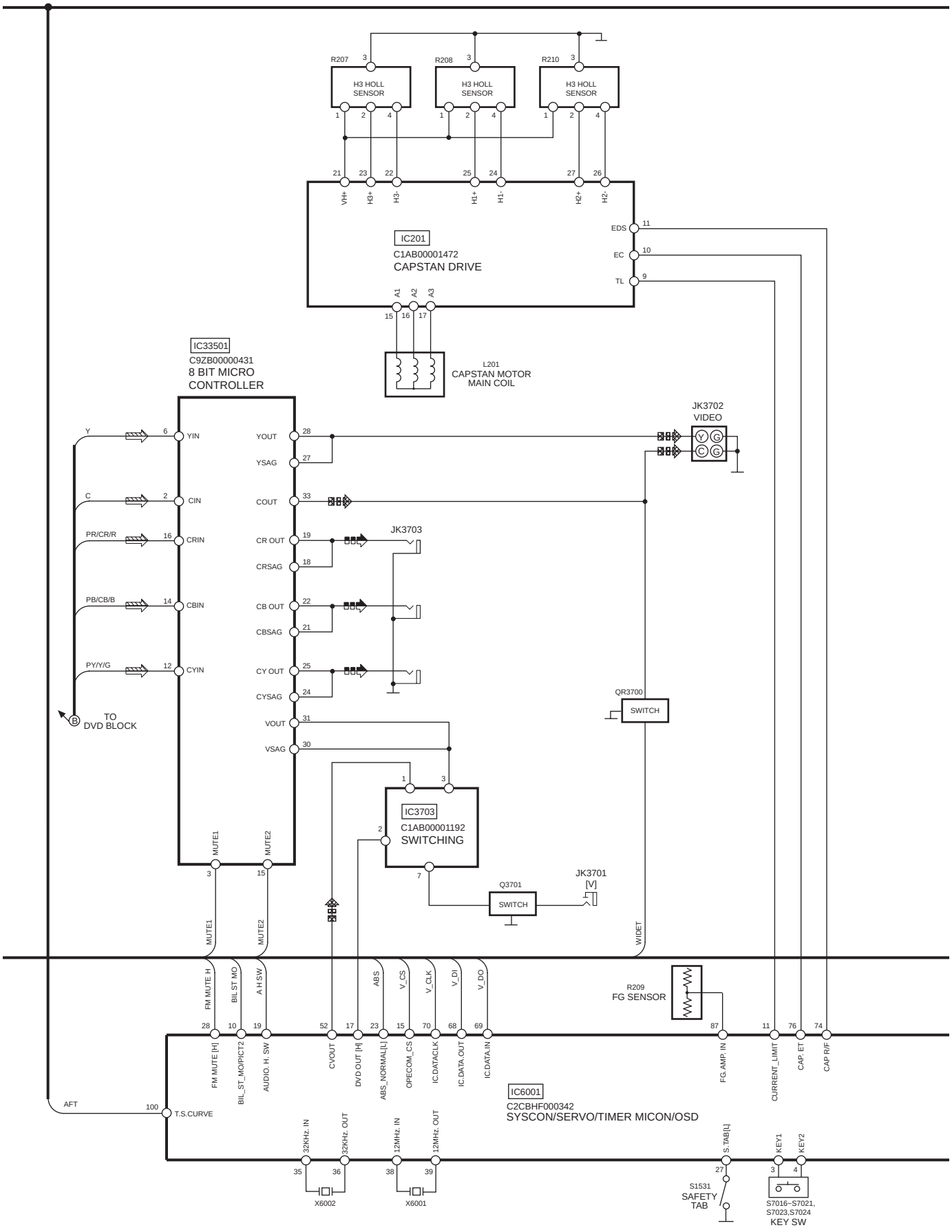


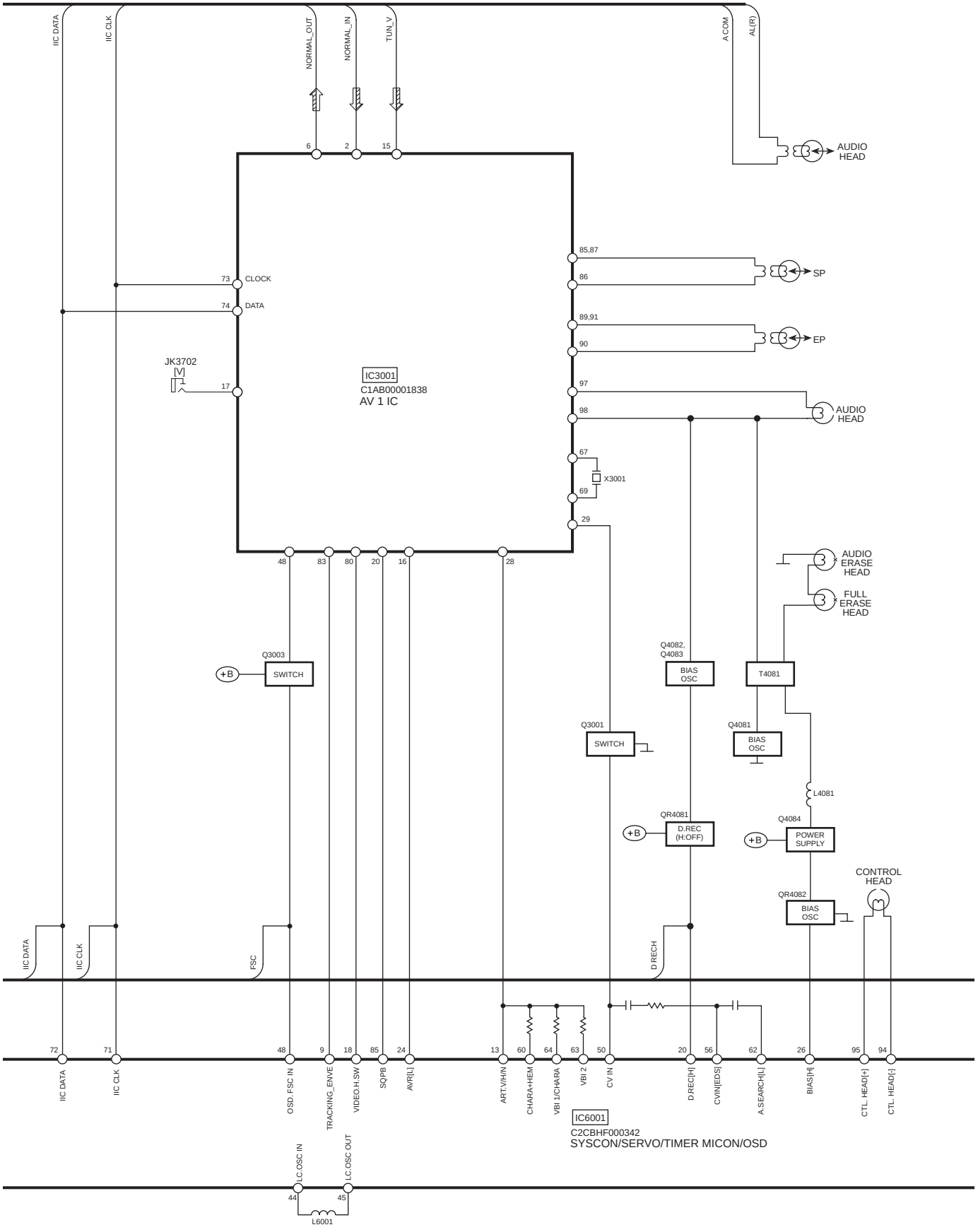

DSP_FL(R)
LEVEL1
LEVEL2
IC303
C1BB00000782
4CH VOLUME IC
17(16) BYPASSL(R)
PORT2 2
PORT3 3
15(13) LIN(R)
LOUT(R) 31(32)
6 SWIN
SWOUT 36
11 CIN
COUT 33
9(8) SLIN(R)
SLOUT(R) 34(35)
1 PORT1
LATCH
DATA
CLOCK
39
40
41
IC501
KIA4558FEL
DUAL OP AMP
LOUT(R)
SW
C
SL(R)
IC403
C0ABCB000040
QUAD OP AMP
AA
DP7201
FL DISPLAY
Q7001
FL DRIVE
FROM
POWER
TRANSFORMER
D7202
QR7201
SWITCH
+B
QR7202
SWITCH
15~23,
25~50
1~4,
60~64
SEG01
SEG35
DIG00
DIG08
IC7201
C0HBB0000039
FL DRIVER
/CS
/RESET
SCK
SDATA
Q405 MUTING SWITCH
Q402 MUTING SWITCH
Q403 MUTING SWITCH
Q409 MUTING SWITCH
Q406 MUTING SWITCH
Q408 SWITCH (CF ON/OFF)
Q407 MUTING SWITCH
VR7201
VOLUME JOG
JOG A
JOG B
VOL_CS
VOL_DA
VOL_CK
MUTE_SW
MUTE_S
CF_ON/OFF
MUTE_C
FLD_CS
FLD_RST
FLD_CK
FLD_DA
FL_CONT
IC36001
C2CBJG000414
MICRO CONTROLLERS
KEY2
KEY1
91
97
KEY SW
S7001~S7003,
S7005~S7013

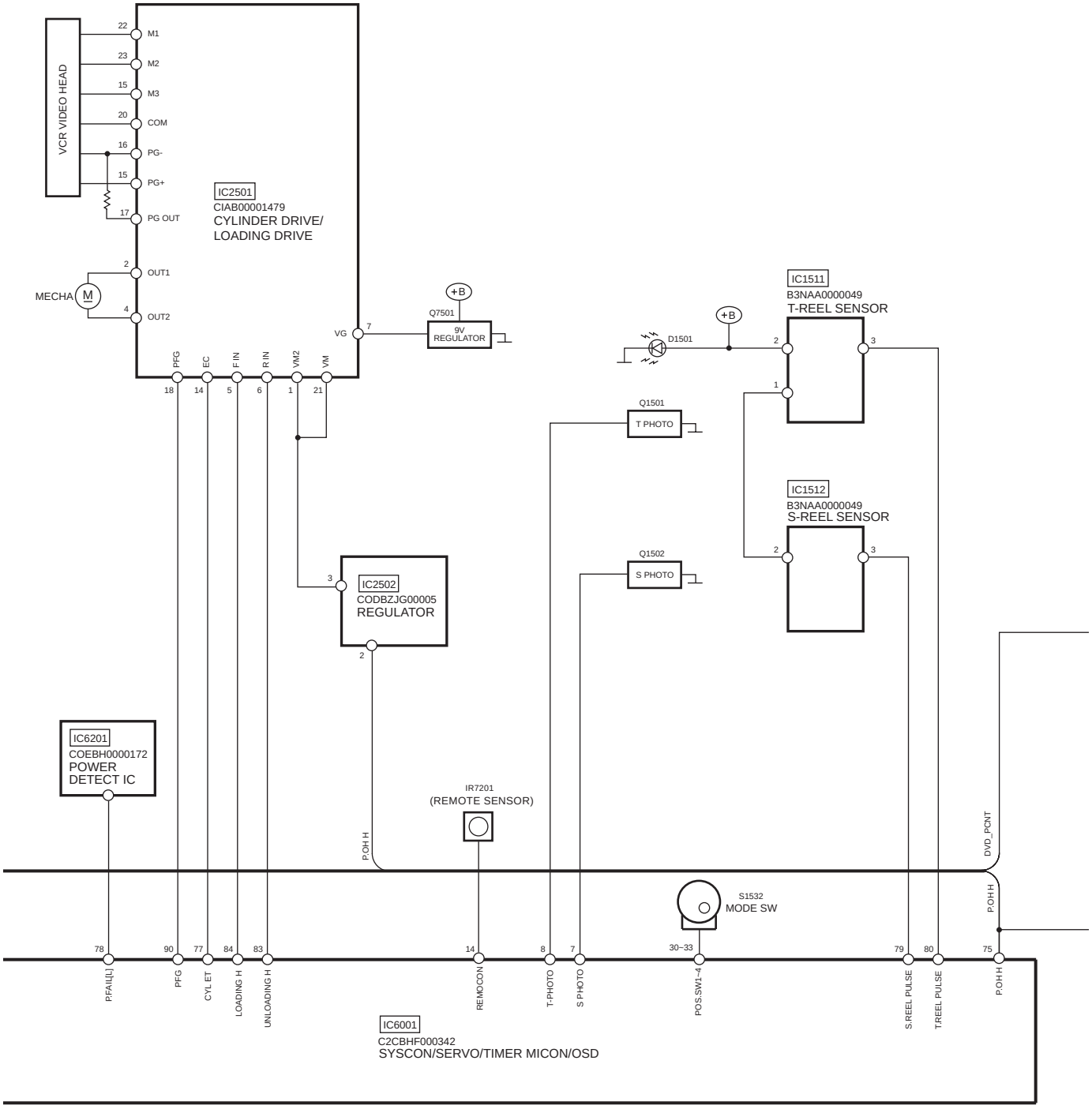

SIF
NORMAL_IN
NORMAL_OUT
A.COM
A.L (R)
IC4501
AN3663FBP-AV
HI-FI IC
3(1) BS IN[L](R)
24(22) HA1(2)
21 A_COM
62 MAI
61 MAO
48 SIF IN
FL4561
JK3701
AUX L(R)
14(9) E1
L(R) 57(53)
LINE L(R)
FL(R)
IC201
C2HBZC000013
DSP
68(72) IN1(R)
66(70) IN3(R)
3 X1
X201
4 X0
AOT1 11(14)
AOT3 27
AOT4 30
IFDA 54
IFCK 53
LATCH 52
/RST 50
DSP_C
DSP_S
IC202
KIA4558FEL
DUAL OP AMP
5(3)
6(2)
7(1)
DSPFL(R)
QR4506
(QR4505)
MUTING SWITCH
QR4504
MUTING SWITCH
MUTE CT 36
27 AH SW
45 VCOFO
43 DATA
42 CLK
OUT 29
D4501
PB FM IN 30
LED PORT L 56
ENV 28
IC36002
C3EBCG000043
EEPROM
(NOT SUPPLIED)
3 5 4
AH SW
FSC
IIC DATA
IIC CLK
ABS
BIL ST MO
D REC H
FM MUTE H
V_DO
V_DI
V_CLK
V_CS
35 36 37 38
92 44 45 48
55 56 57
DSP_DAT
DSP_CLK
DSP_LAT
DSP_RST
ECS
EDA
ECK
IC36001
C2CBJG000414
MICRO CONTROLLERS
CH_SW
ST_SW
PLAY_SW
BT_SW
OPEN_SW
47 2 1 24 7
S5 CHANGE
S1 STOCK
S2 PLAY
S3 BOTTOM
S4 OPEN

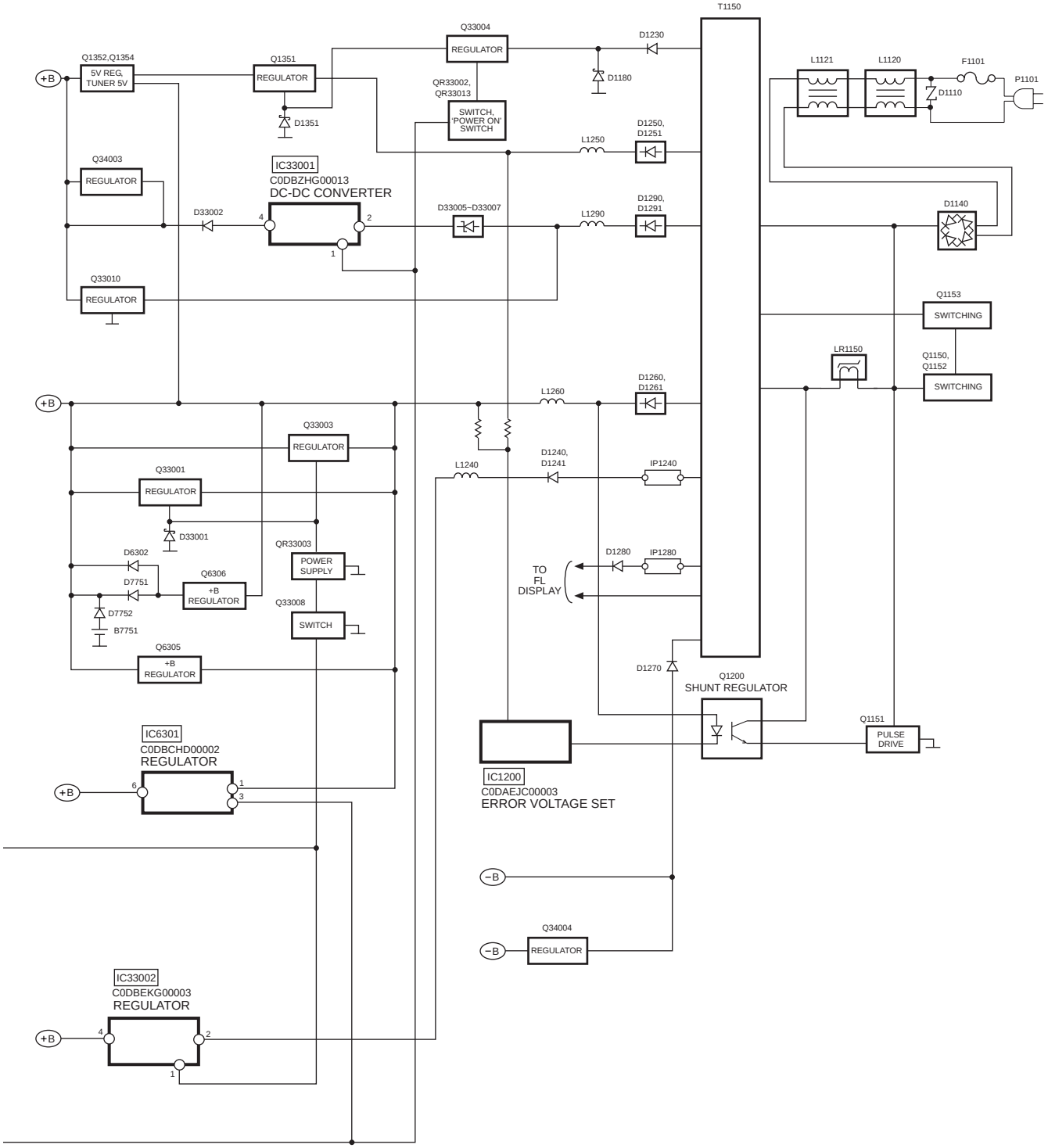

LOUT(R)
AA
LINEL(R)
LEVEL2
LEVEL1
SW
IC401
KIA4558FEL
OP AMP
IC402
M62456FPE1
SUPER BASS
D402
(D401)
Q401
MUTING SWITCH
Q410
MUTING SWITCH
Q412
SWITCH
+B
JK3701
[L]([R])
QR4701
(QR4702)
MUTING SWITCH
QR4703
MUTING SWITCH
RCH
HEADPHONE
JK7001
Q404
MUTING SWITCH
Q411
MUTING SWITCH
RM11
UP/DOWN MOTOR
IC11
C0GAG0000007
UP/DOWN MOTOR DRIVE
RM21
LOADING MOTOR
IC21
C0GAG0000007
LOADING MOTOR DRIVE
IC36003
C0EBH0000172
POWER DETECT IC
IC36001
C2CBJG000414
MICRO CONTROLLERS
MUTE_F
P_FAIL
MUTE_HP
UP/DOWN_F
UP/DOWN_R
MUTE_L
HP_SW
LOAD_F
LOAD_R


SL(R)
C
ACTIVE SUB WOOFER
7(11)
FL(R)
SUBAC2
3
17
SW
SUBAC1
1
15
C
12(14)
SL(R)
DCDET
2
5
HIC_MUTE
19
PCONT
21
SYNC
Q601,Q602
SWITCH
D603,
D605
Q605
SWITCH
Q606
SWITCH
Q603,Q604
SWITCH
+B
D614
FP601
Q610
REGULATOR
D608~D611
D607
Q607,Q608
DC DETECT
SWITCH
Q33006
REGULATOR
Q33007
REGULATOR
QR33005
LED
DRIVE
QR33012
LED
DRIVE
−B
Q609
REGULATOR
D613
D611
FP602
D606
Q611
REGULATOR
MUTE1
DVD_PCNT
RMT
WIDE1
59
66
18
70
22
60
78
67
19
5
MUTE_H
ASW_PCONT
ASW_AC
LED_BACK
V_MUTE2
V_MUTE_1
ASW_PDET
DVD_PCNT
RMT
WIDE1
IC36001
C2CBJG000414
MICRO CONTROLLERS


R207
R208
R210
H3 HOLL SENSOR
H3 HOLL SENSOR
H3 HOLL SENSOR
VH+
H3+
H3-
H1+
H1-
H2+
H2-
IC201
C1AB00001472
CAPSTAN DRIVE
EDS
EC
TL
A1
A2
A3
L201
CAPSTAN MOTOR
MAIN COIL
IC33501
C9ZB00000431
8 BIT MICRO
CONTROLLER
JK3702
VIDEO
Y
C
PR/CR/R
PB/CB/B
PY/Y/G
YIN
CIN
CRIN
CBIN
CYIN
YOUT
YSAG
COUT
CR OUT
CRSAG
CB OUT
CBSAG
CY OUT
CYSAG
VOUT
VSAG
JK3703
TO
DVD BLOCK
QR3700
SWITCH
IC3703
C1AB00001192
SWITCHING
Q3701
SWITCH
JK3701
[V]
MUTE1
MUTE2
WIDET
R209
FG SENSOR
FM MUTE H
BIL ST MO
A H SW
ABS
V_CS
V_CLK
V_DI
V_DO
FM MUTE [H]
BIL_ST_MO/PICT2
AUDIO. H. SW
CVOUT
DVD OUT [H]
ABS_NORMAL[L]
OPECOM_CS
IC.DATACLK
IC.DATA.OUT
IC.DATA.IN
FG.AMP. IN
CURRENT_LIMIT
CAP. ET
CAP R/F
AFT
T.S.CURVE
IC6001
C2CBHF000342
SYSCON/SERVO/TIMER MICON/OSD
32KHz. IN
32KHz. OUT
12MHz. IN
12MHz. OUT
X6002
X6001
S. TAB[L]
KEY1
KEY2
S1531
SAFETY
TAB
S7016~S7021,
S7023,S7024
KEY SW


IIC DATA
IIC CLK
NORMAL_OUT
NORMAL_IN
TUN_V
A.COM
AL(R)
AUDIO HEAD
6
2
15
85,87
86
SP
89,91
90
EP
73 CLOCK
74 DATA
JK3702
17
IC3001
C1AB00001838
AV 1 IC
97
98
AUDIO HEAD
67
X3001
69
29
48
83
80
20
16
28
AUDIO ERASE HEAD
FULL ERASE HEAD
Q3003
+B
SWITCH
Q4082, Q4083
BIAS OSC
T4081
Q3001
SWITCH
Q4081
BIAS OSC
L4081
QR4081
+B
D.REC (H:OFF)
Q4084
+B
POWER SUPPLY
CONTROL HEAD
QR4082
BIAS OSC
IIC DATA
IIC CLK
FSC
D.RECH
72
71
48
9
18
85
24
13
60
64
63
50
20
56
62
26
95
94
IIC DATA
IIC CLK
OSD.FSC IN
TRACKING_ENVE
VIDEO.H.SW
SQPB
AVR(L)
ART.V/H/N
CHARA+HEM
VBI 1/CHARA
VBI 2
CV IN
D.REC[H]
CVIN[EDS]
A.SEARCH[L]
BIAS[H]
CTL. HEAD[+]
CTL. HEAD[-]
IC6001
C2CBHF000342
SYSCON/SERVO/TIMER MICON/OSD
LC.OSC IN
LC.OSC OUT
44
45
L6001


VCR VIDEO HEAD
22 M1
23 M2
15 M3
20 COM
16 PG-
15 PG+
17 PG OUT
IC2501
CIAB00001479
CYLINDER DRIVE/
LOADING DRIVE
2 OUT1
MECHA M
4 OUT2
VG 7
Q7501
9V
REGULATOR
+B
PFG 18
EC 14
F IN 5
R IN 6
VM2 1
VM 21
IC1511
B3NAA0000049
T-REEL SENSOR
D1501
+B
2
3
1
Q1501
T PHOTO
IC1512
B3NAA0000049
S-REEL SENSOR
Q1502
S PHOTO
3
IC2502
CODBZJG00005
REGULATOR
2
IC6201
COEBH0000172
POWER
DETECT IC
IR7201
(REMOTE SENSOR)
P.OH H
DVD_PCNT
P.OH H
S1532
MODE SW
78 P.FAIL[L]
90 PFG
77 CYL ET
84 LOADING H
83 UNLOADING H
14 REMOCON
8 T-PHOTO
7 S PHOTO
30~33 POS.SW1~4
79 S.REEL PULSE
80 T.REEL PULSE
75 P.OH H
IC6001
C2CBHF000342
SYSCON/SERVO/TIMER MICON/OSD




SIGNAL LINES

| | | |
|---|---|---|
| : MAIN SIGNAL LINE | : DVD AUDIO SIGNAL LINE | : PLAYBACK SIGNAL LINE |
| : DVD (AUDIO /VIDEO) SIGNAL LINE | : DVD VIDEO SIGNAL LINE | : RECORD SIGNAL LINE |
| : AUX SIGNAL LINE | : VIDEO SIGNAL LINE | : FM/AM SIGNAL LINE |
| : CD/DA SIGNAL LINE | | |

( ) Indicates the Pin No. of Right Channel.

NOTE : Signal Lines are applicable to the Left Channel only.

# 21 Notes of Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

Note:

**S1** : Stock switch
**S2** : Play switch
**S3** : Botton switch
**S4** : Open switch
**S5** : Change switch
**S1531** : Safety Tab switch
**S1532** : Mode switch
**S7001** : Disc 5 switch
**S7002** : Disc Change switch
**S7003** : Disc 4 switch
**S7005** : Disc 3. switch
**S7006** : D.Play switch
**S7007** : Disc 2 switch
**S7008** : Stop switch
**S7009** : Disc 1 switch
**S7010** : Disc Check switch
**S7011** : Selector switch
**S7012** : Open/Close switch
**S7013** : Power switch
**S7016** : Play switch
**S7017** : FF switch
**S7018** : Stop switch
**S7019** : Rew switch
**S7020** : Channel Up switch
**S7021** : Channel Down switch
**S7023** : Rec switch
**S7024** : Eject switch

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.
- **Importance safety notice :**

  Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer´s specified parts shown in the parts list.

**Caution !**

IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

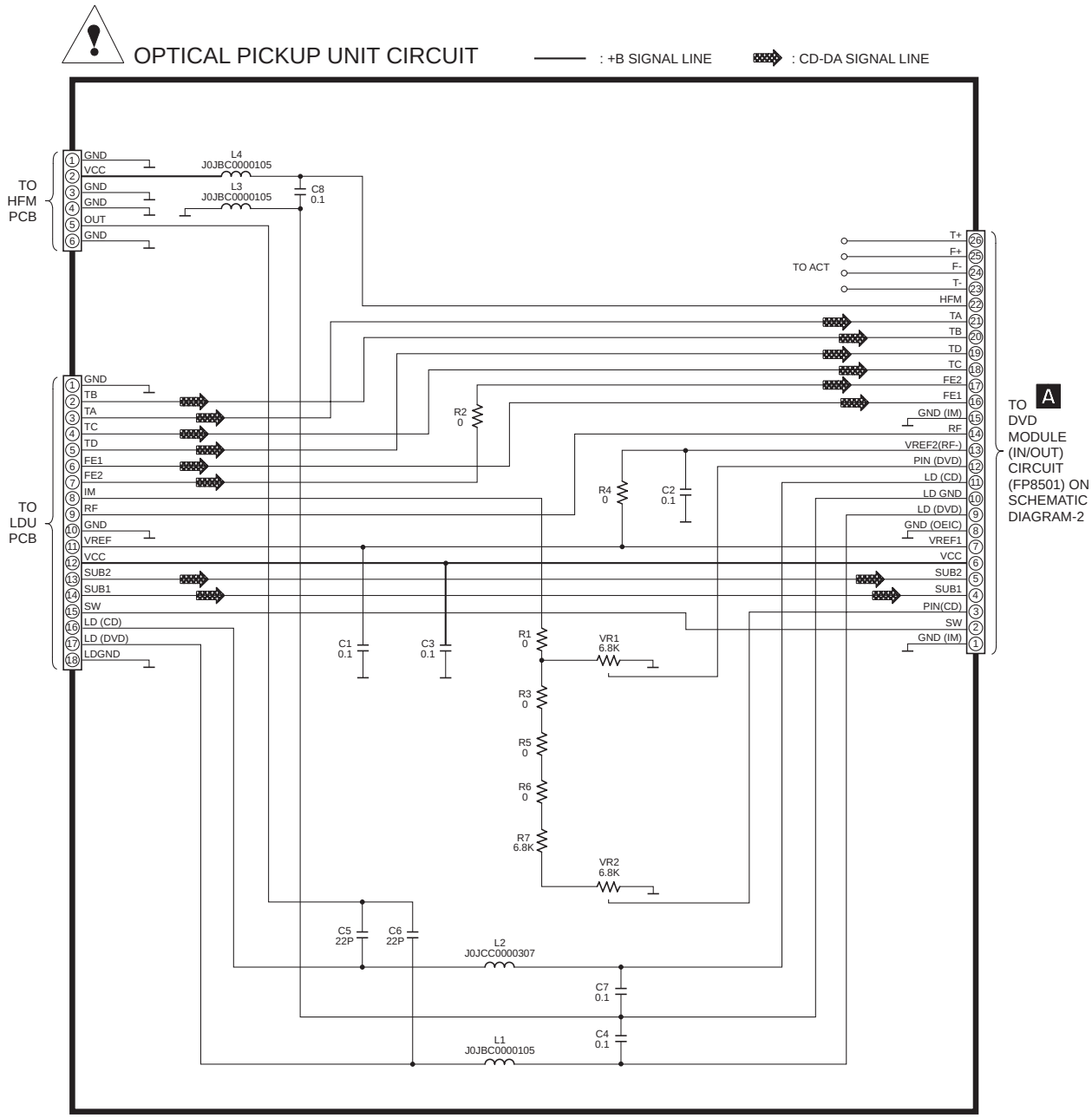
**CAUTION:** FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1101, 1.6A 125V FUSE

RISK OF FIRE-REPLACE FUSE AS MARKED.

# 22 Schematic Diagram

## 22.1. DVD Module Circuit

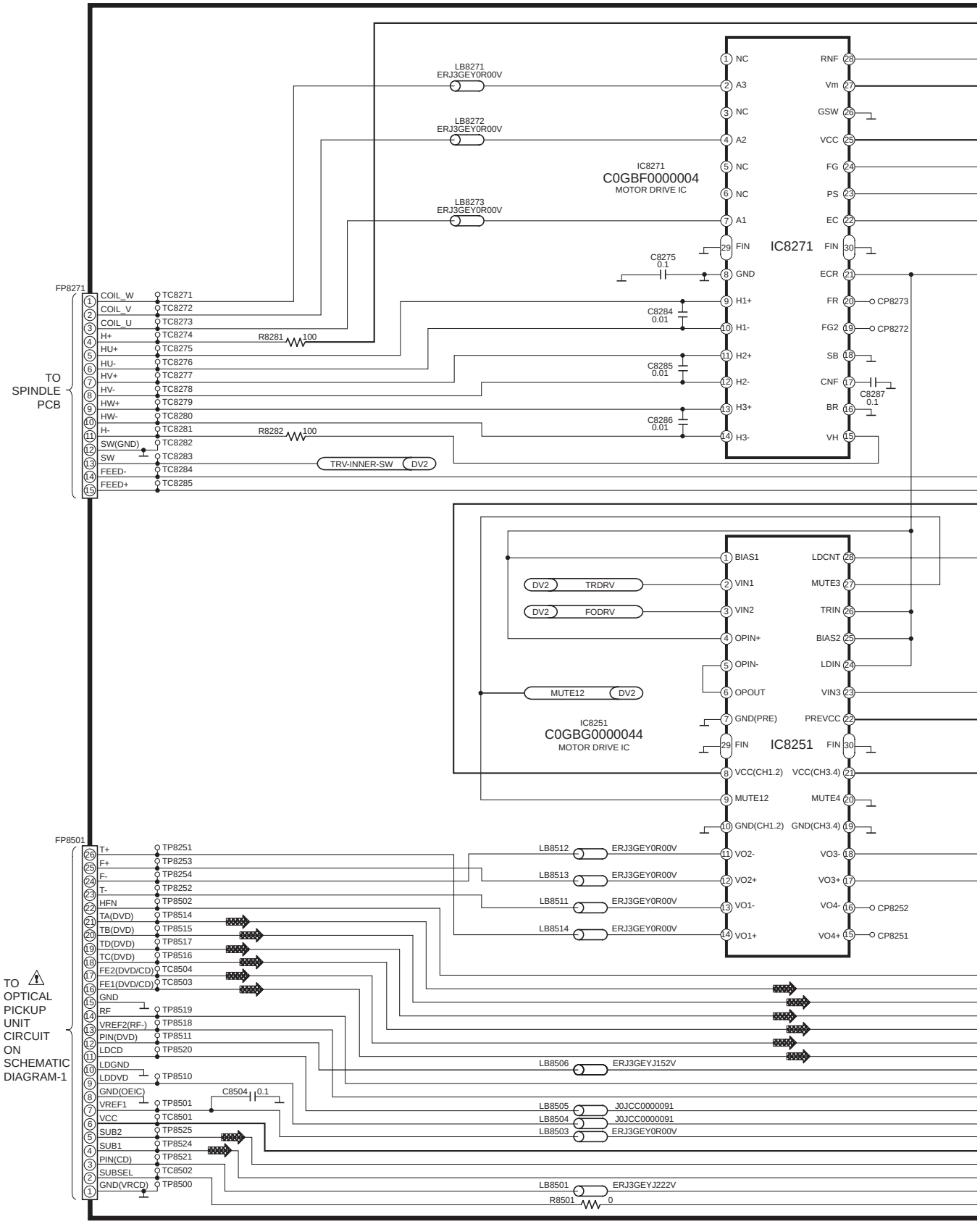
SCHEMATIC DIAGRAM - 1



# SCHEMATIC DIAGRAM - 2

## A DVD MODULE (IN/OUT) CIRCUIT

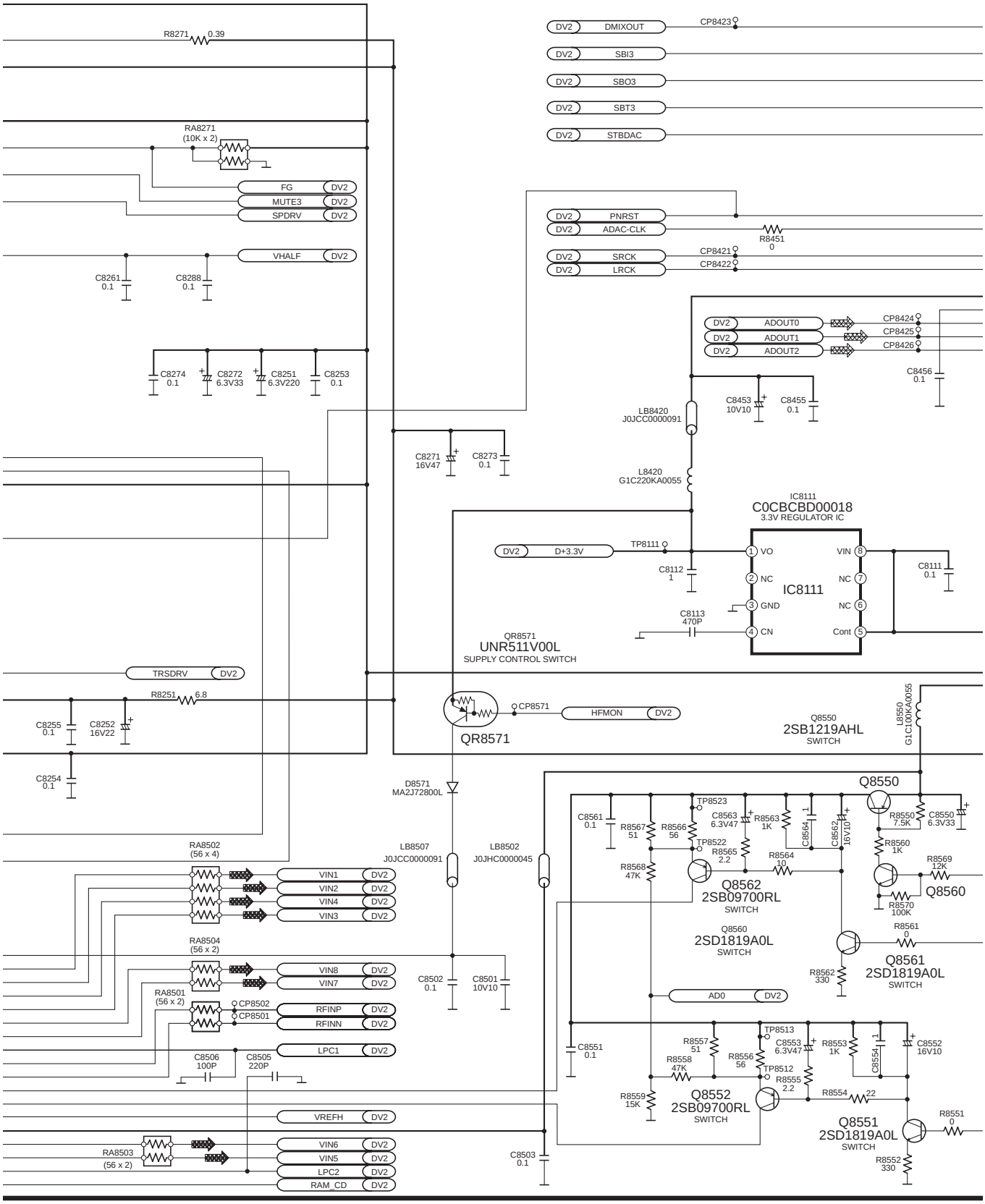
——— : +B SIGNAL LINE  ⇒ : CD-DA SIGNAL LINE



# SCHEMATIC DIAGRAM - 3

## A DVD MODULE (IN/OUT) CIRCUIT

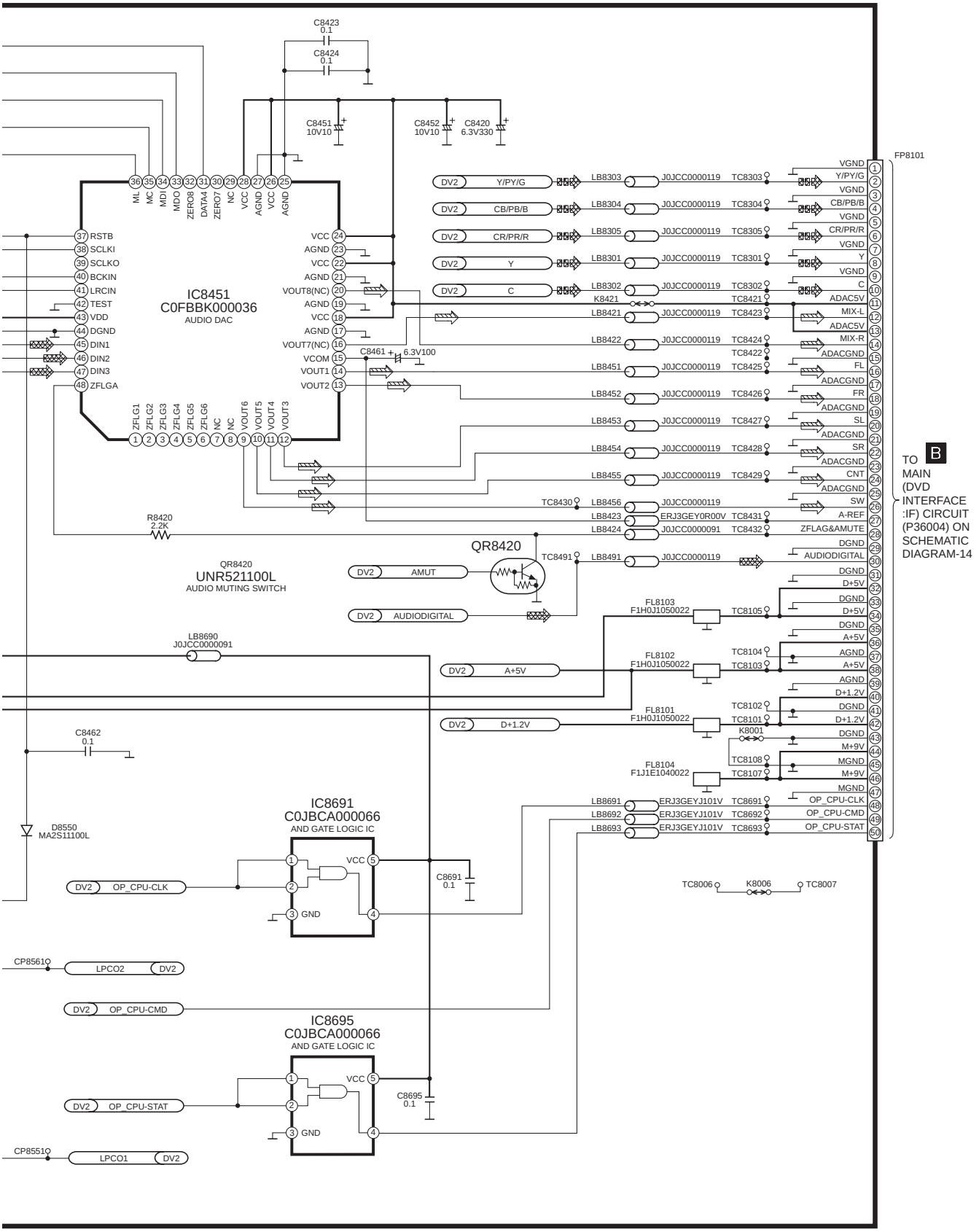
: +B SIGNAL LINE
: DVD AUDIO SIGNAL LINE
: CD-DA SIGNAL LINE



SCHEMATIC DIAGRAM - 4

## A DVD MODULE (IN/OUT) CIRCUIT

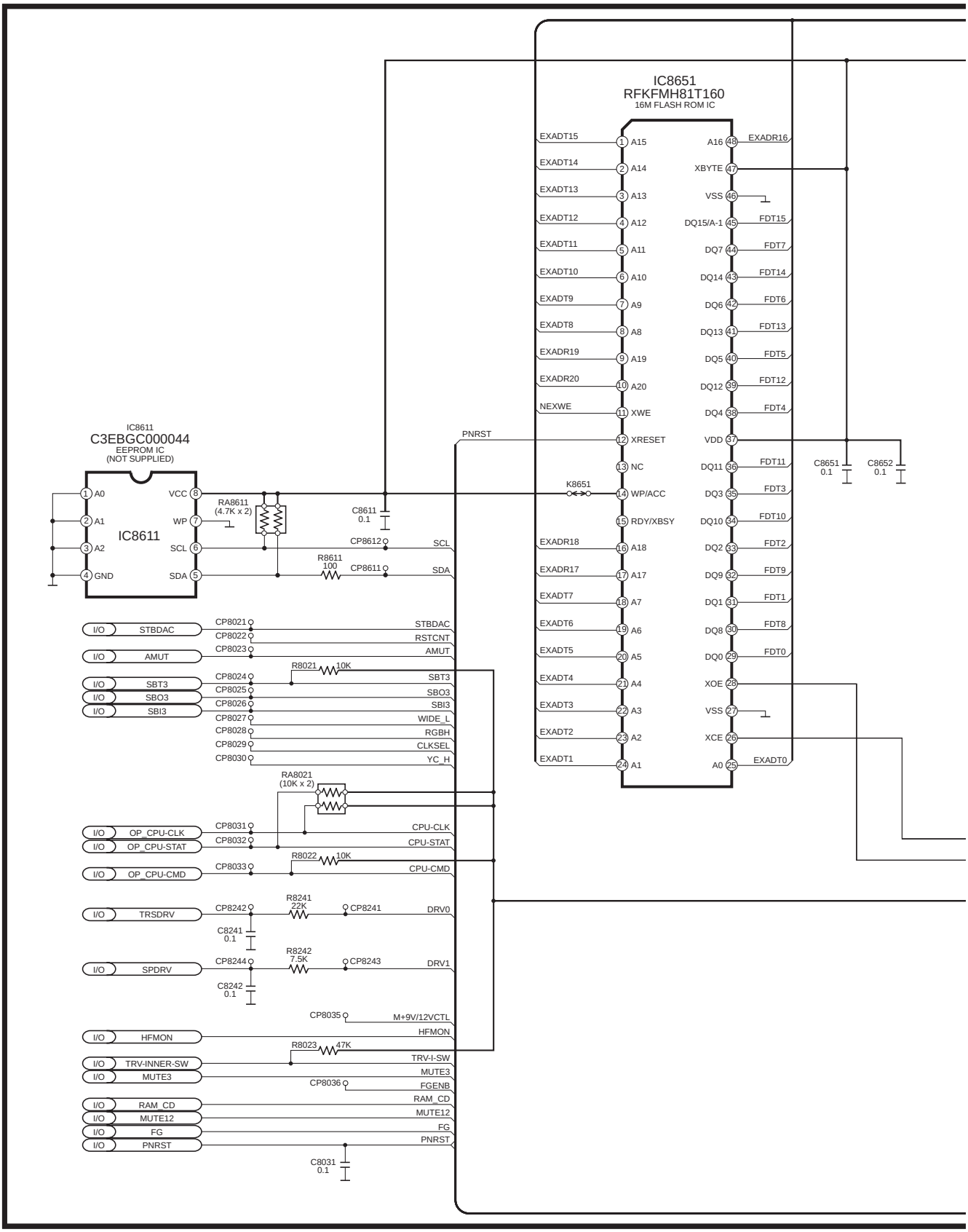
: MAIN SIGNAL LINE
: +B SIGNAL LINE
: DVD AUDIO SIGNAL LINE
: DVD VIDEO SIGNAL LINE



# SCHEMATIC DIAGRAM - 5

## A DVD MODULE (DV2) CIRCUIT

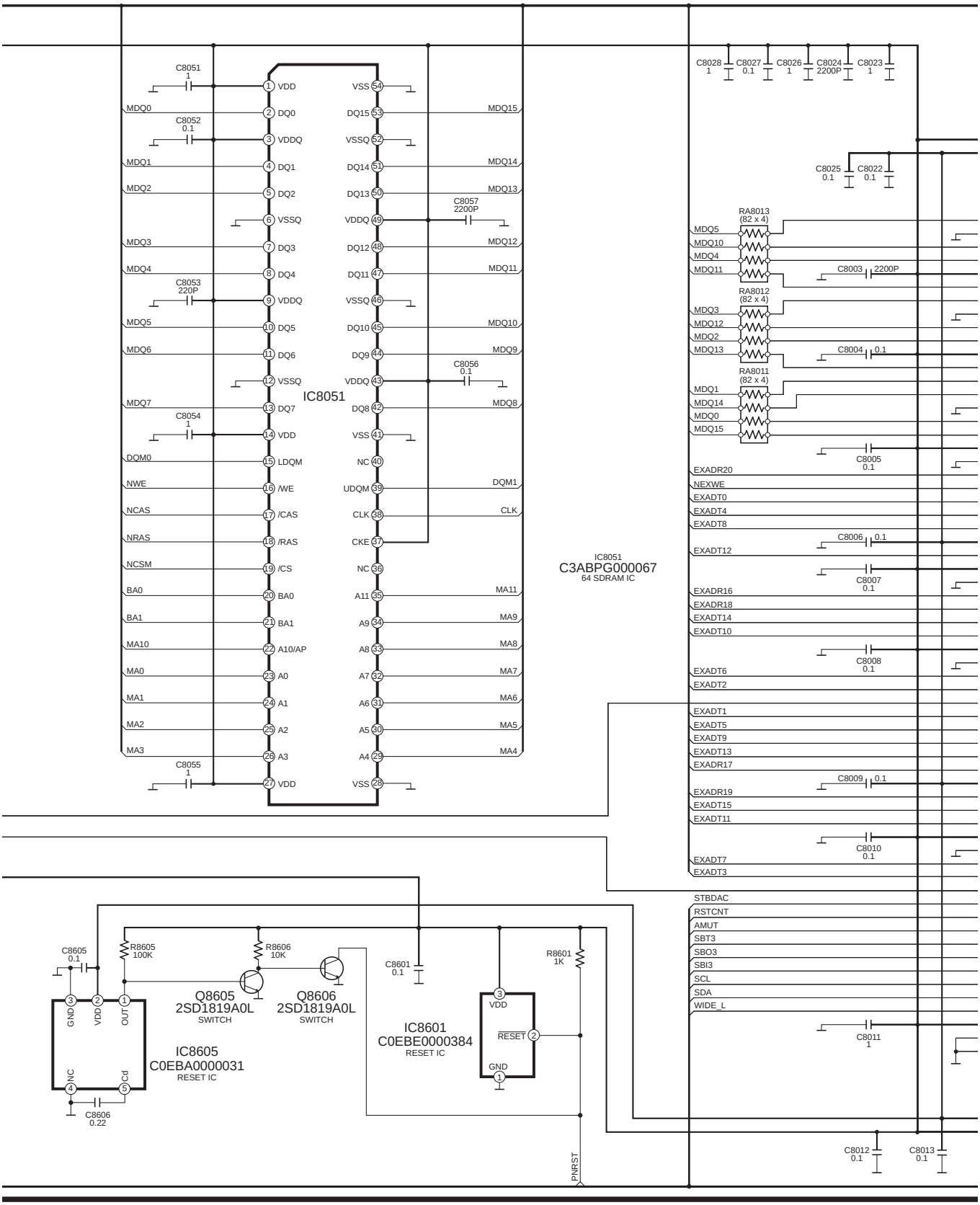
——— : +B SIGNAL LINE



SCHEMATIC DIAGRAM - 6

**A** DVD MODULE (DV2) CIRCUIT

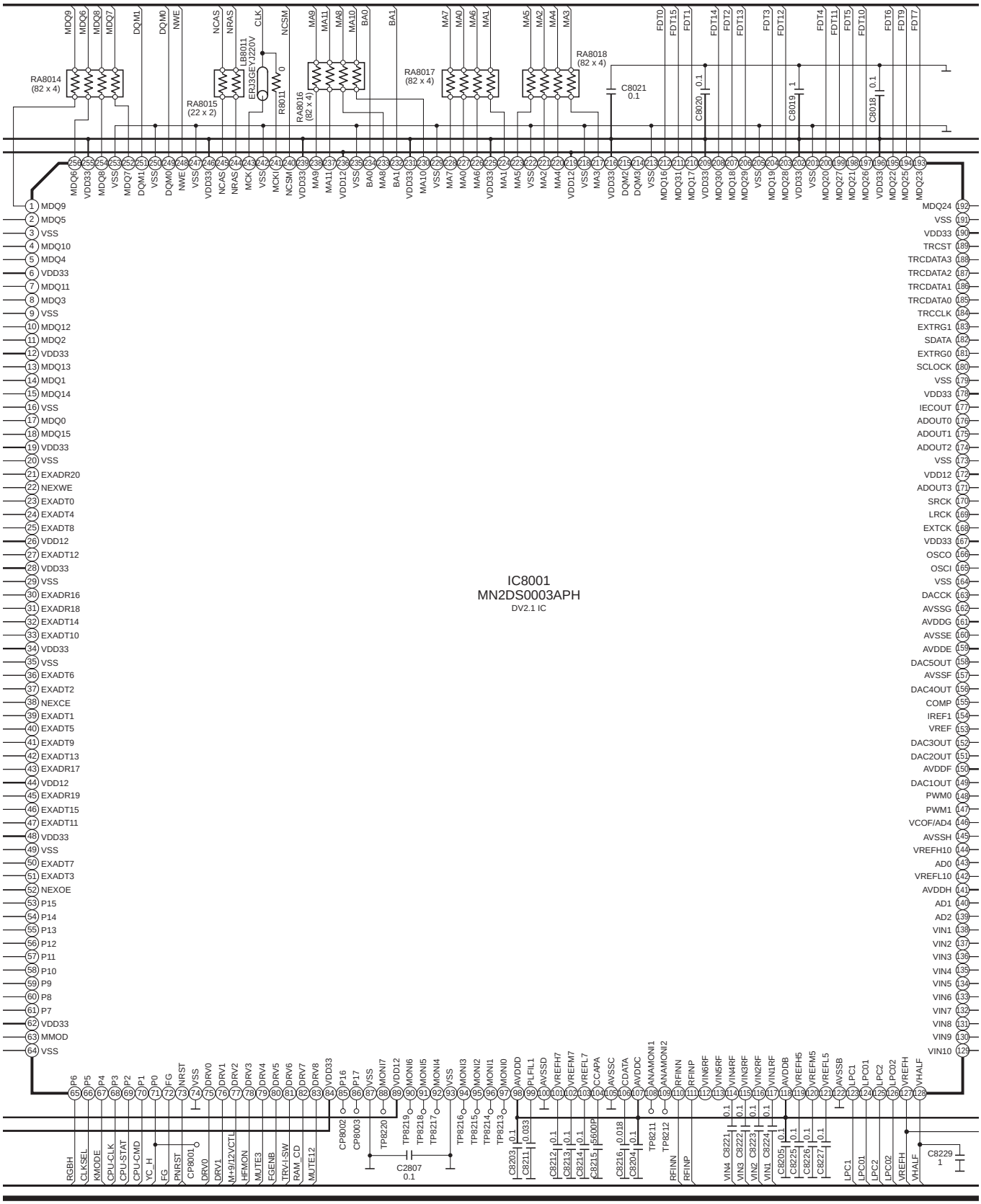
: +B SIGNAL LINE



# SCHEMATIC DIAGRAM - 7

## A DVD MODULE (DV2) CIRCUIT

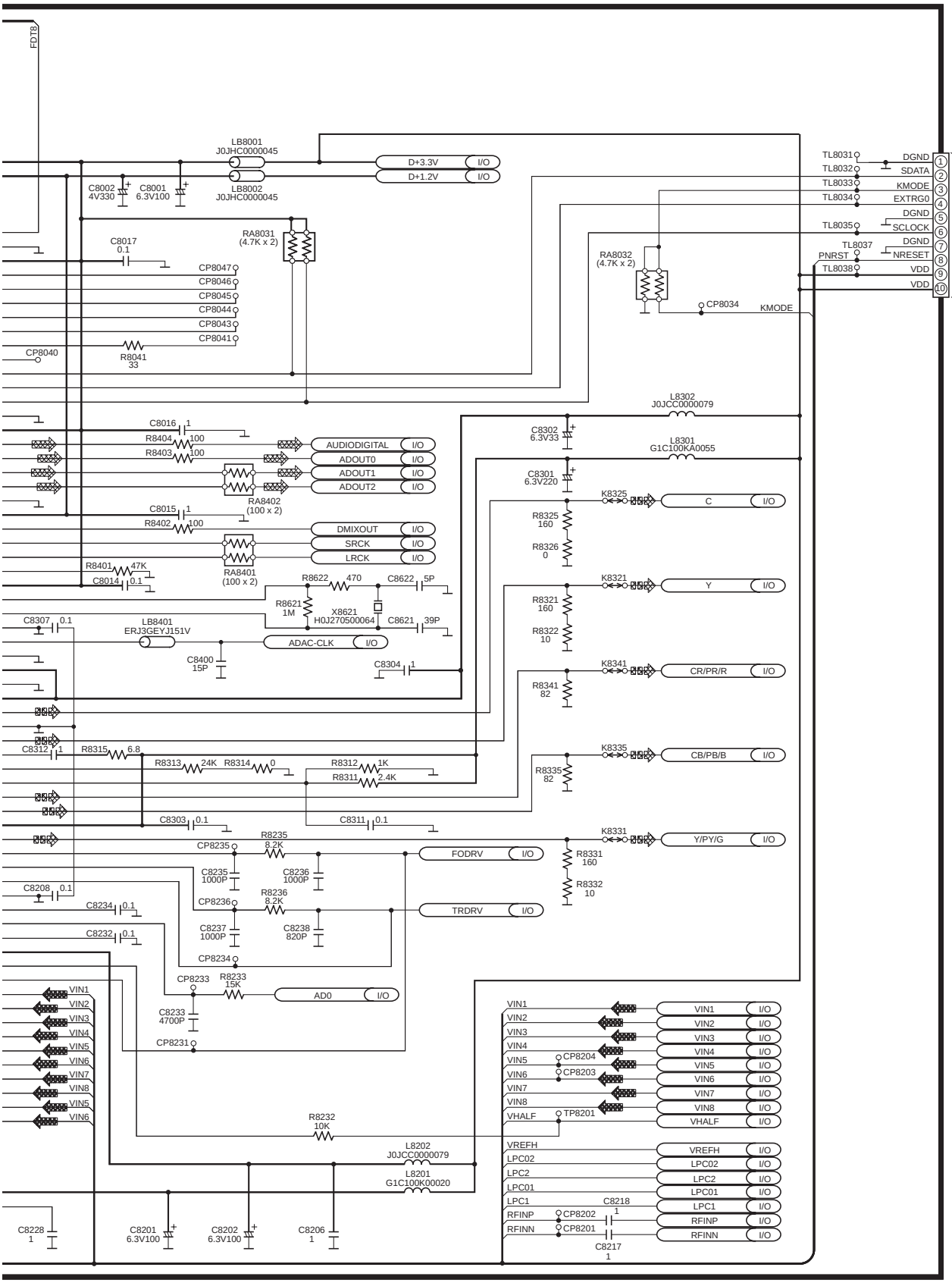
——— : +B SIGNAL LINE



# SCHEMATIC DIAGRAM - 8

## A DVD MODULE (DV2) CIRCUIT

: CD-DA SIGNAL LINE
: +B SIGNAL LINE
: DVD VIDEO SIGNAL LINE
: DVD AUDIO SIGNAL LINE

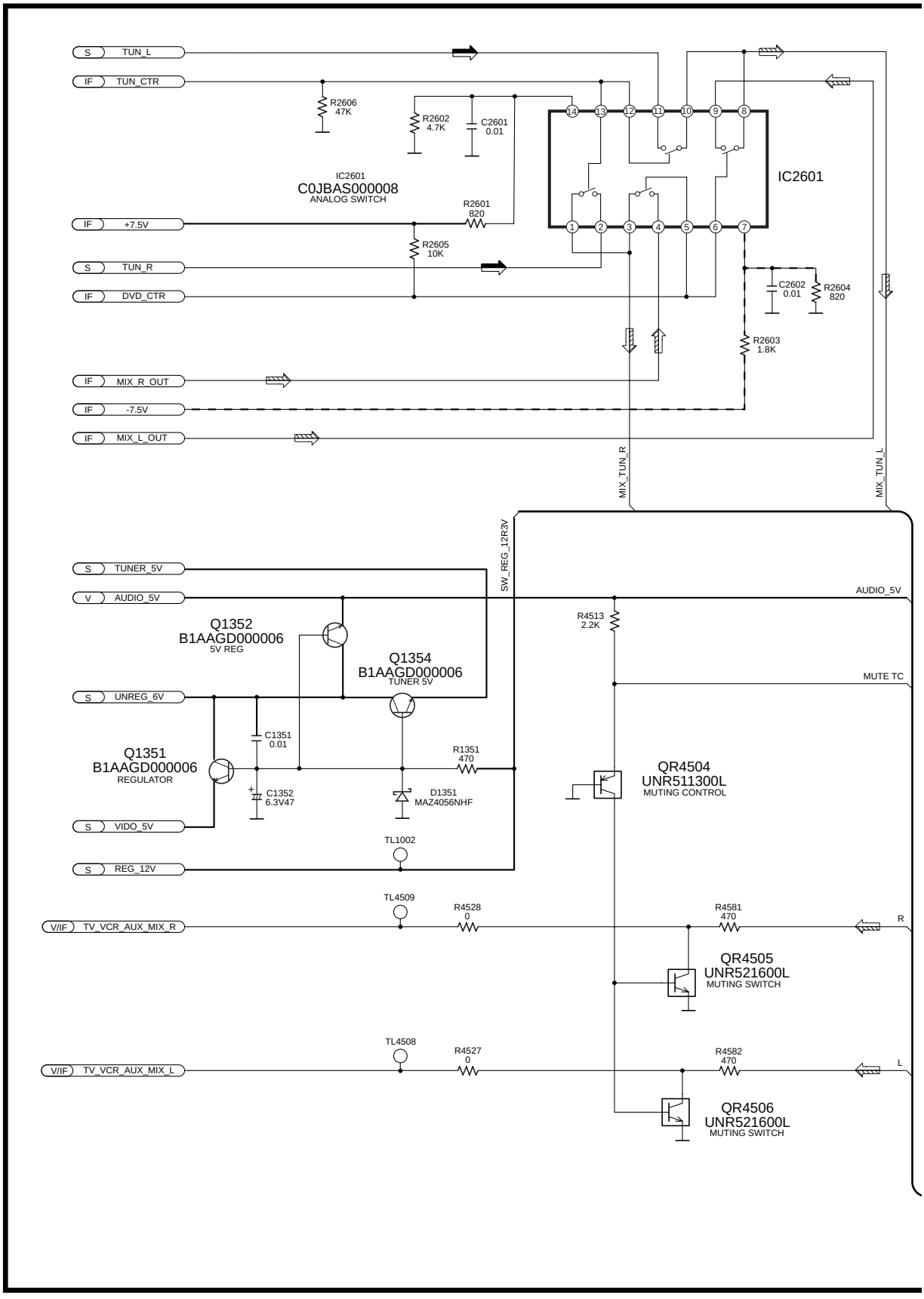


# 22.2. Main Circuit

SCHEMATIC DIAGRAM-9

B MAIN (AUDIO:A) CIRCUIT

: +B SIGNAL LINE
: -B SIGNAL LINE
: MAIN SIGNAL LINE
: AM/FM SIGNAL LINE



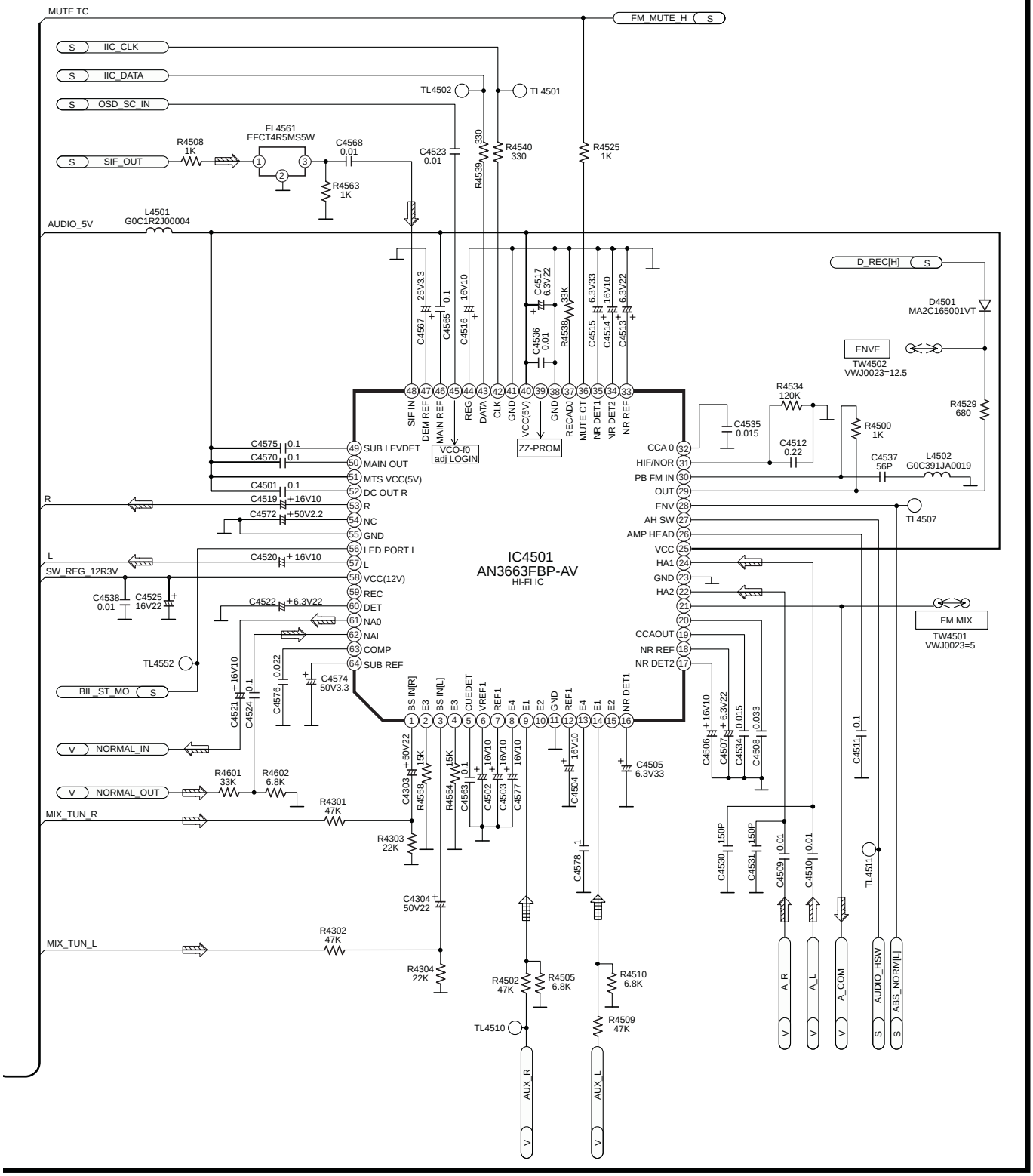
# SCHEMATIC DIAGRAM-10

## B MAIN (AUDIO:A) CIRCUIT

: +B SIGNAL LINE

: MAIN SIGNAL LINE

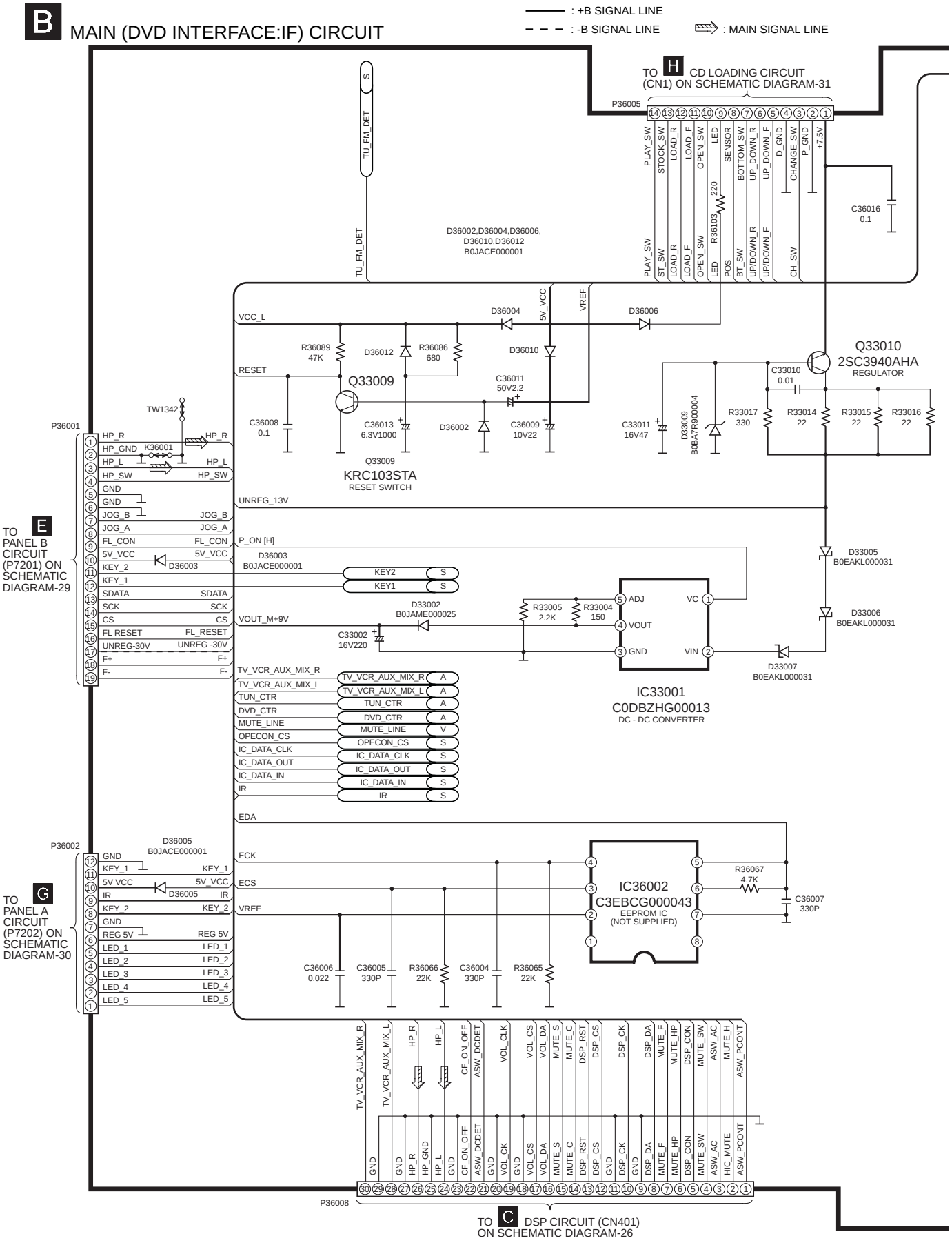
: AUX SIGNAL LINE



# 22.3. Main Circuit

SCHEMATIC DIAGRAM-11

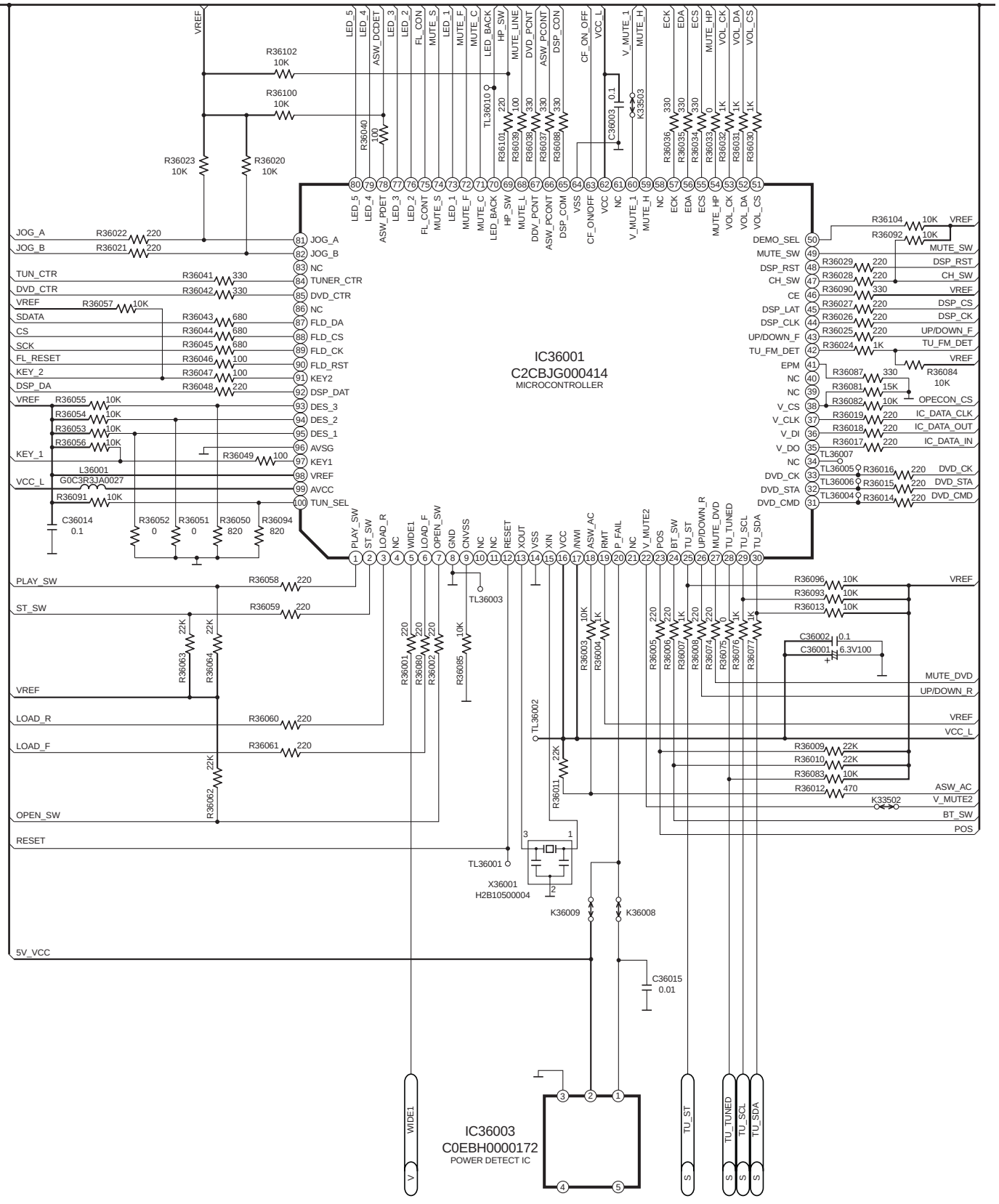
## B MAIN (DVD INTERFACE:IF) CIRCUIT



SCHEMATIC DIAGRAM-12

B MAIN (DVD INTERFACE:IF) CIRCUIT

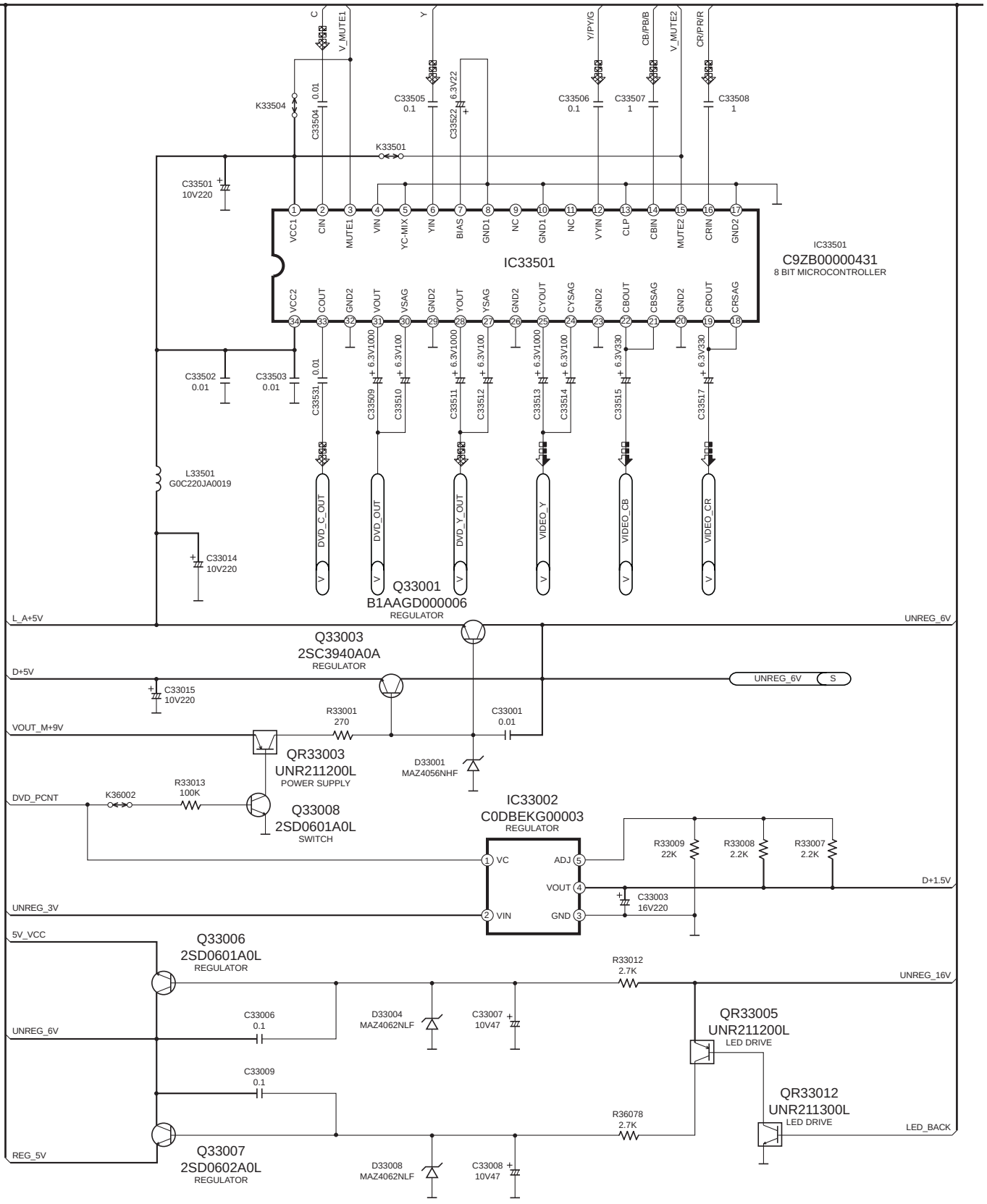
——— : +B SIGNAL LINE



# SCHEMATIC DIAGRAM-13

## B MAIN (DVD INTERFACE:IF) CIRCUIT

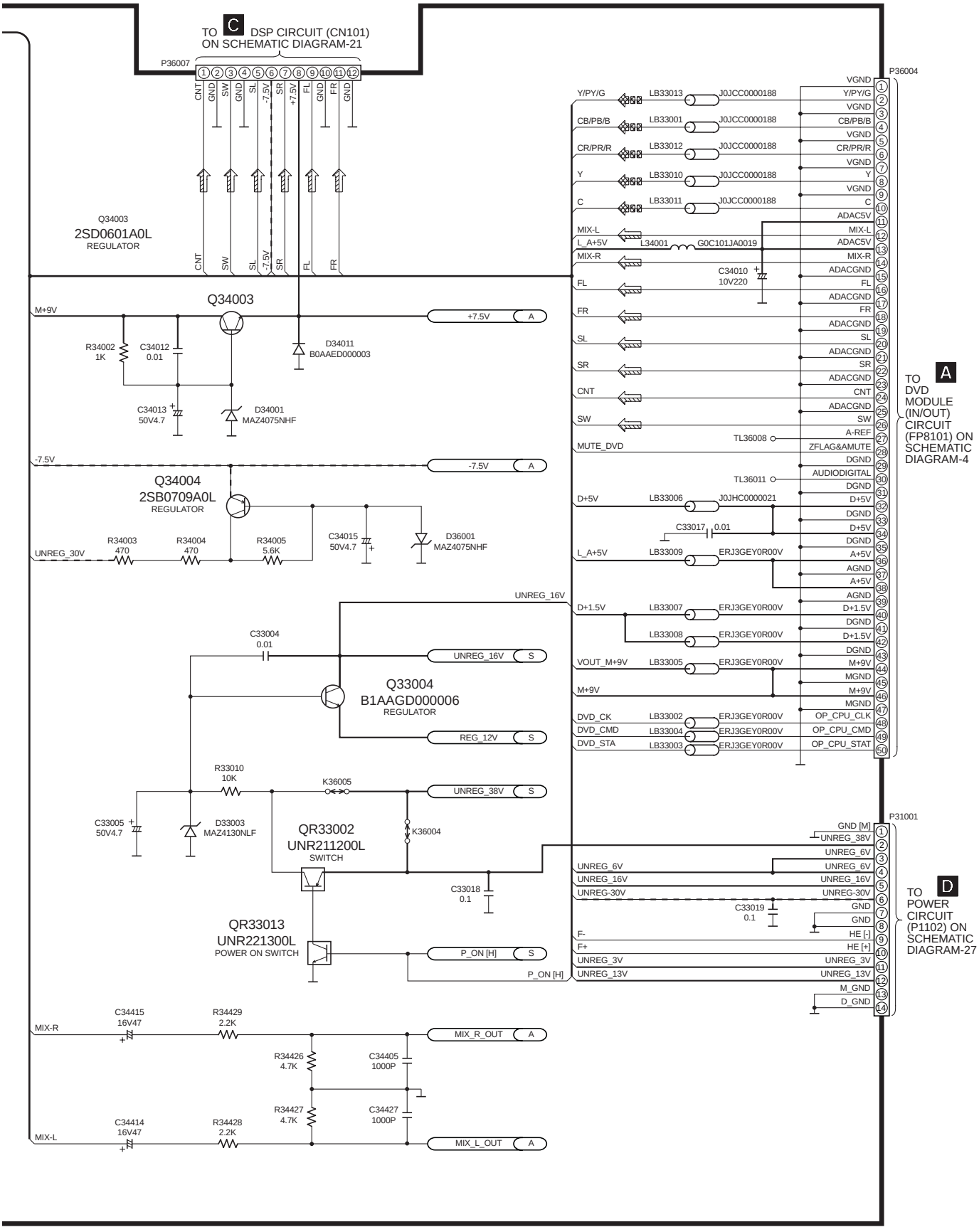
: +B SIGNAL LINE
: DVD VIDEO SIGNAL LINE



# SCHEMATIC DIAGRAM-14

## B MAIN (DVD INTERFACE:IF) CIRCUIT

: +B SIGNAL LINE
: -B SIGNAL LINE
: DVD VIDEO SIGNAL LINE
: MAIN SIGNAL LINE

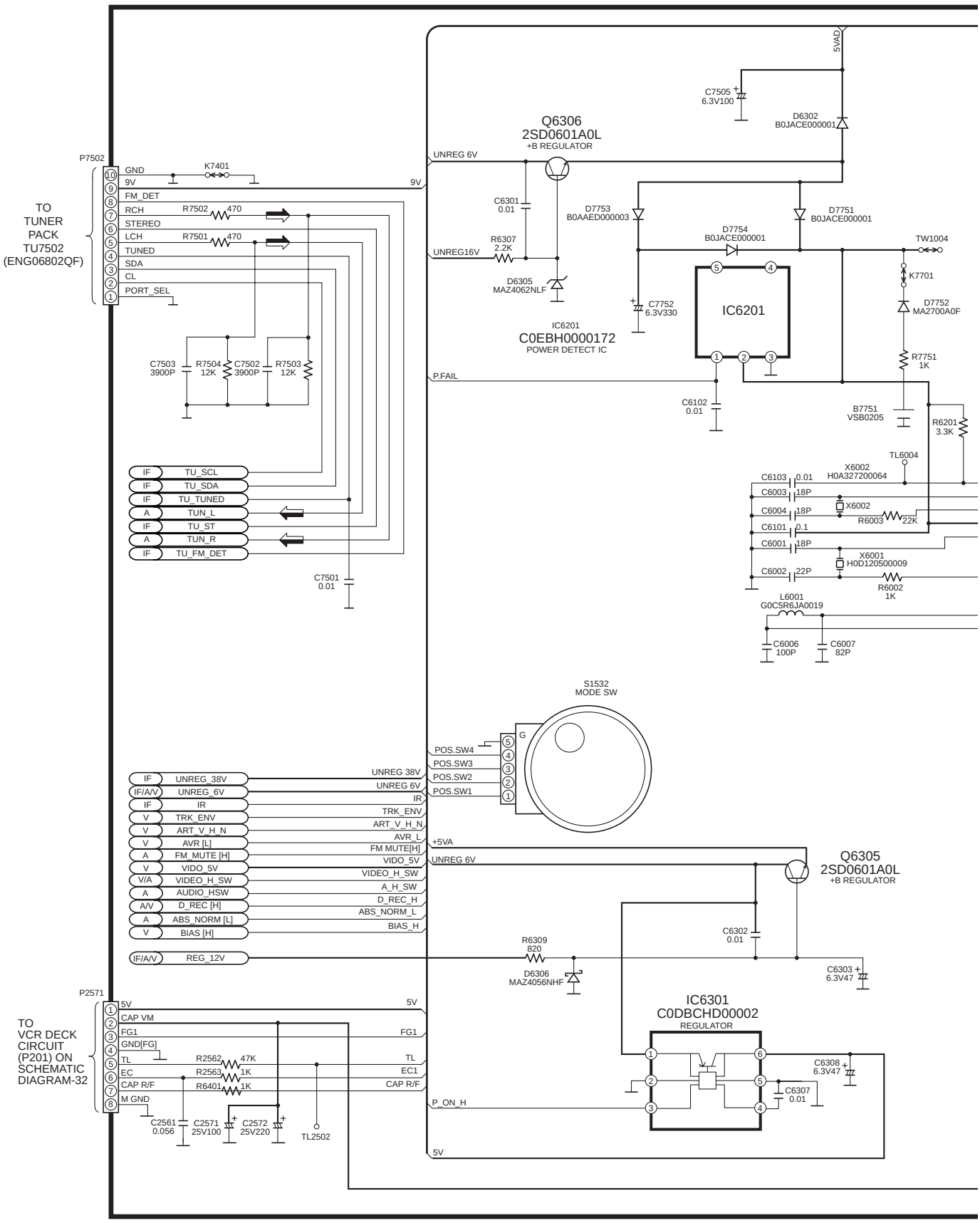


# 22.4. Main Circuit

SCHEMATIC DIAGRAM-15

B MAIN (SYSTEM CONTROL:S) CIRCUIT

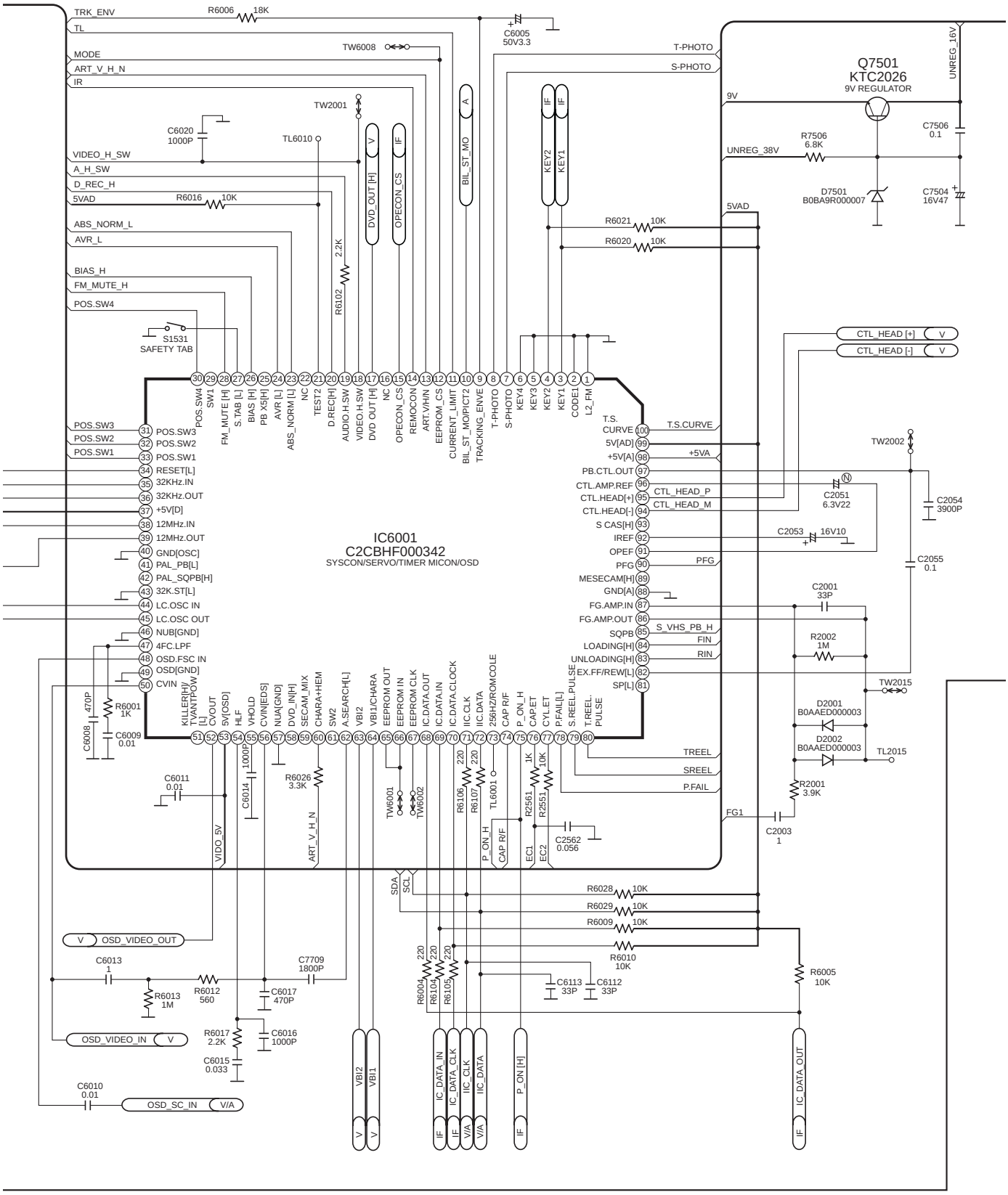
: +B SIGNAL LINE
: FM/AM SIGNAL LINE



# SCHEMATIC DIAGRAM-16

## B MAIN (SYSTEM CONTROL:S) CIRCUIT

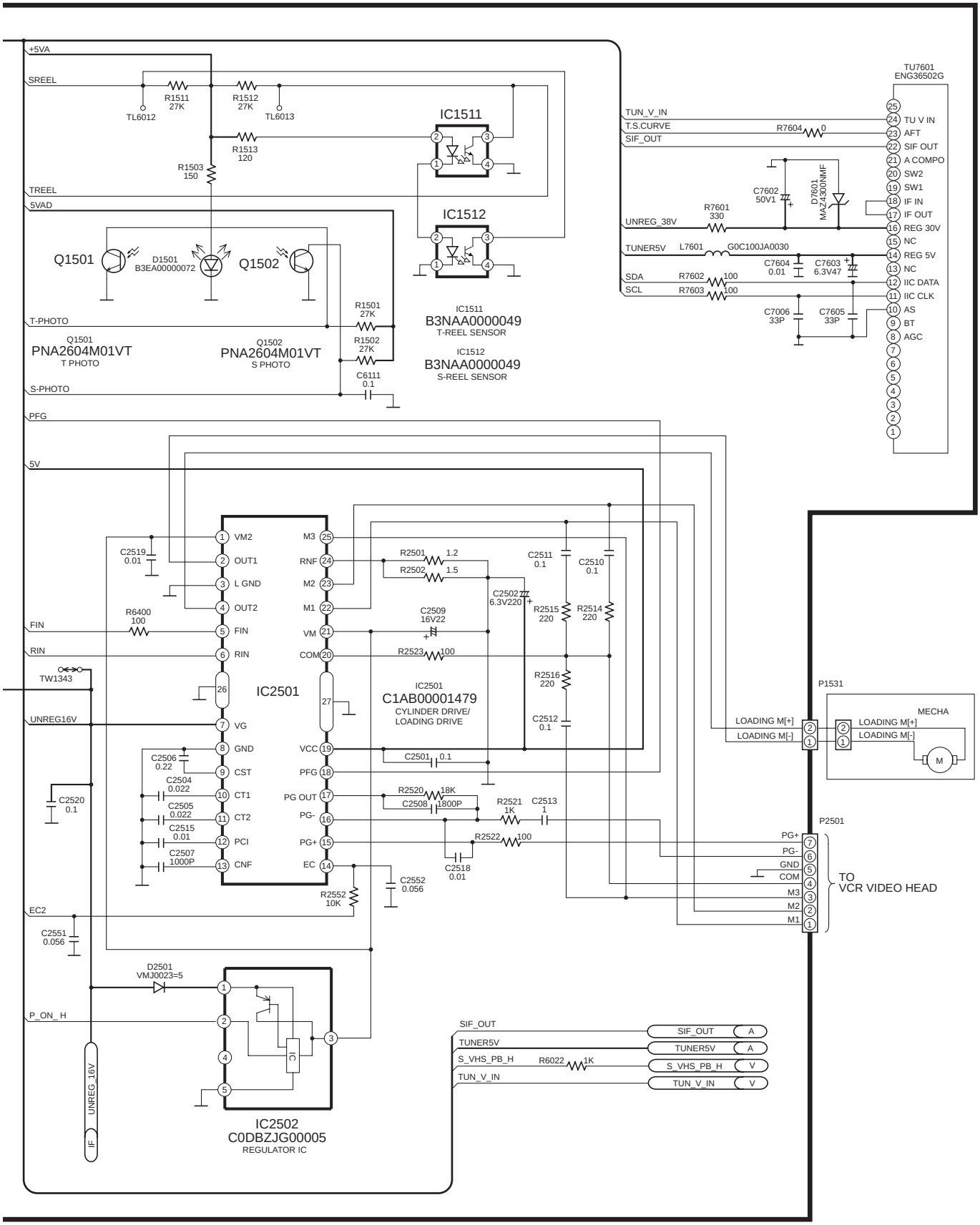
: +B SIGNAL LINE



# SCHEMATIC DIAGRAM-17

## B MAIN (SYSTEM CONTROL:S) CIRCUIT

: +B SIGNAL LINE



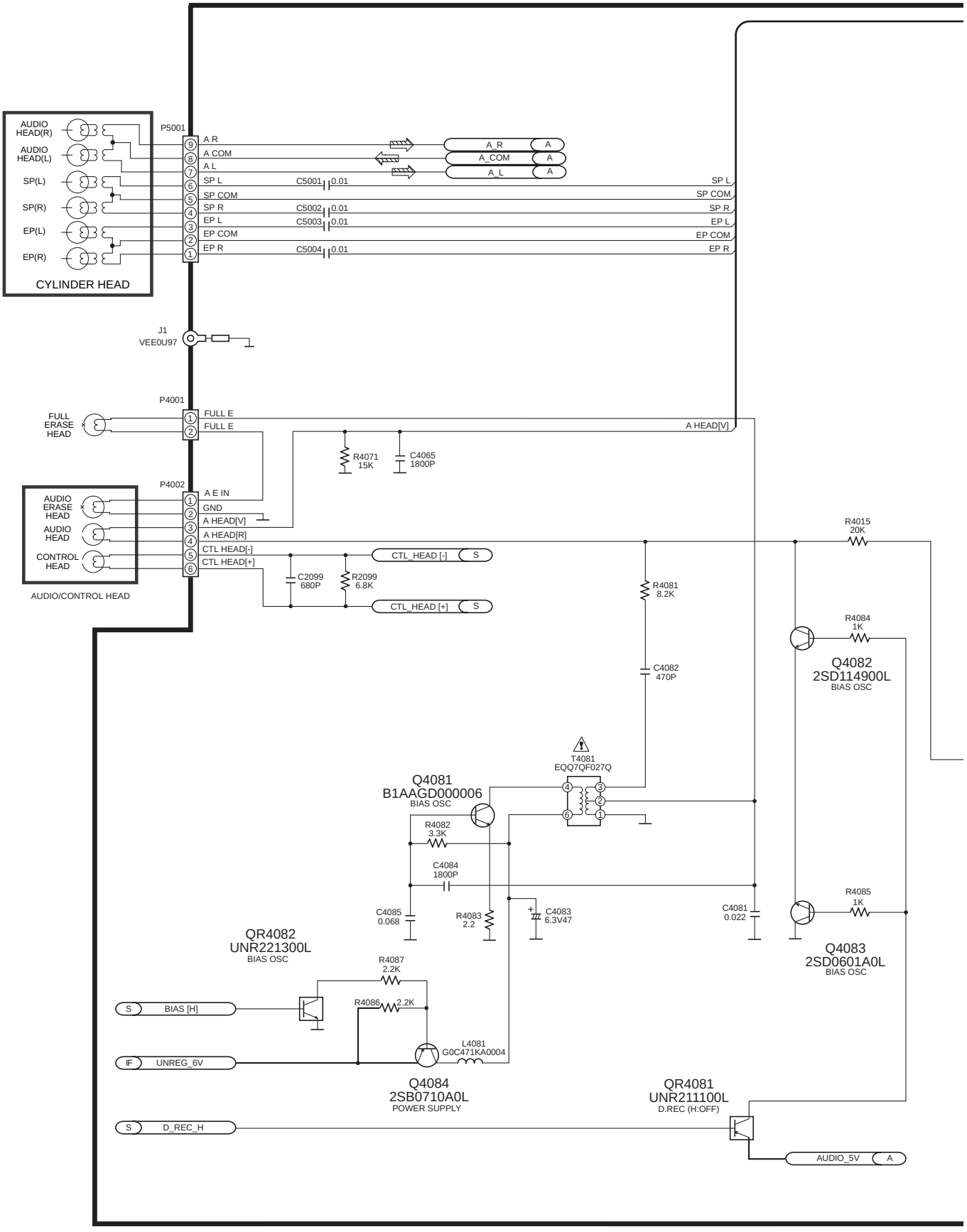
# 22.5. Main Circuit

SCHEMATIC DIAGRAM-18

B MAIN (VIDEO:V) CIRCUIT

: +B SIGNAL LINE

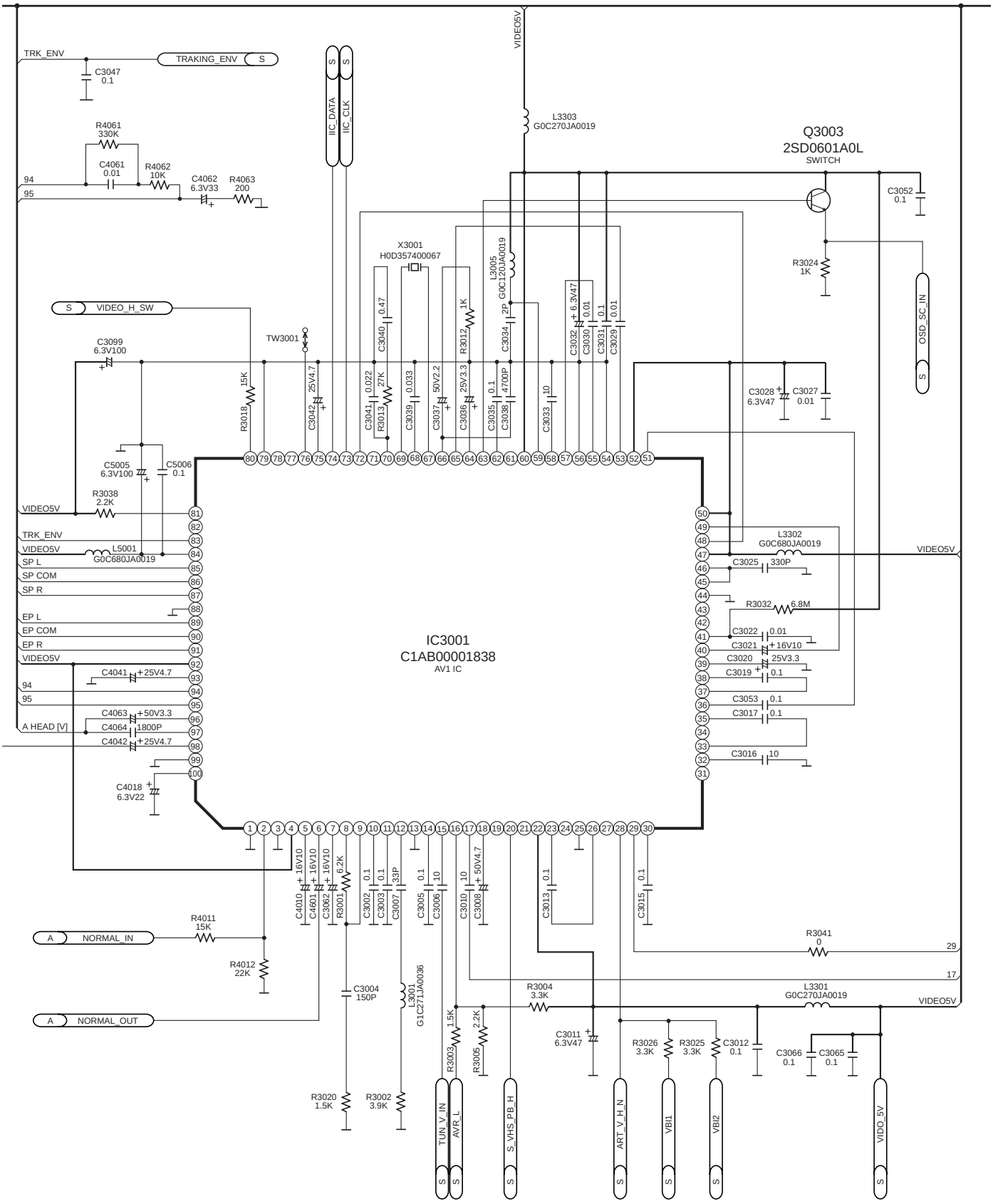
: MAIN SIGNAL LINE



# SCHEMATIC DIAGRAM-19

## B MAIN (VIDEO:V) CIRCUIT

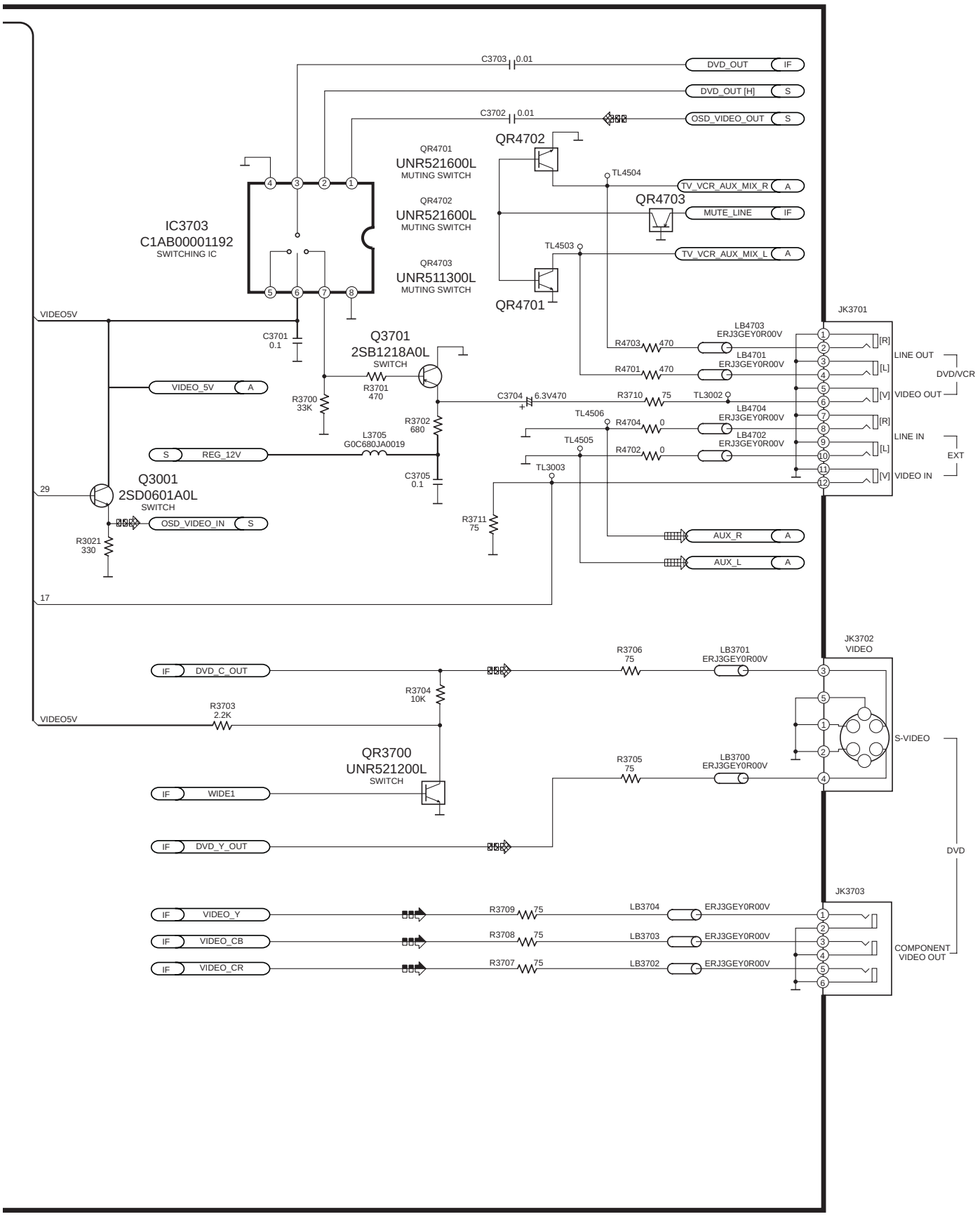
——— : +B SIGNAL LINE



# SCHEMATIC DIAGRAM-20

## B MAIN (VIDEO:V) CIRCUIT

: +B SIGNAL LINE
: DVD VIDEO SIGNAL LINE
: VIDEO SIGNAL LINE
: AUXILLARY SIGNAL LINE



# 22.6. DSP Circuit

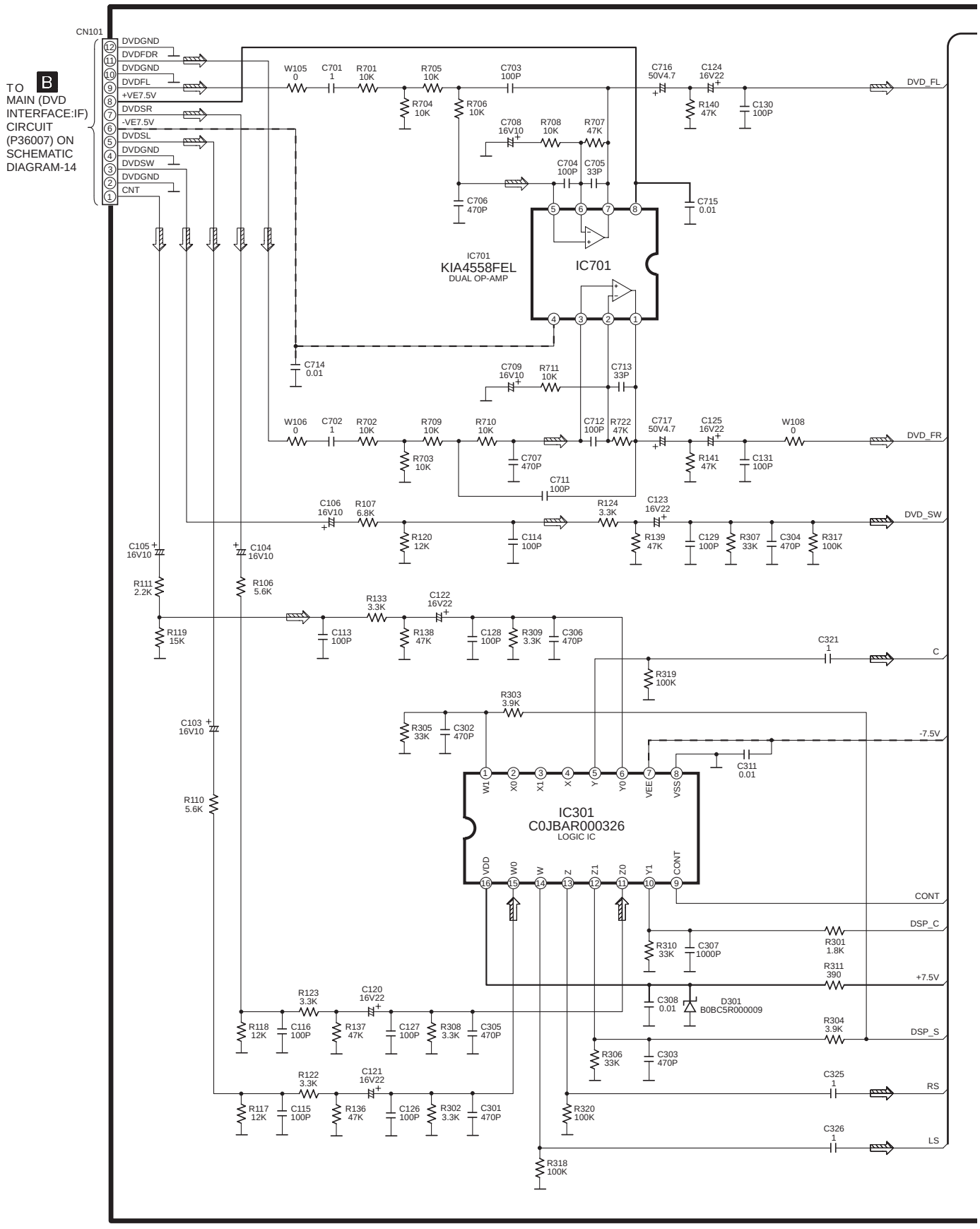
SCHEMATIC DIAGRAM-21

C DSP CIRCUIT

——— : +B SIGNAL LINE

– – – : -B SIGNAL LINE

⇨ : MAIN SIGNAL LINE



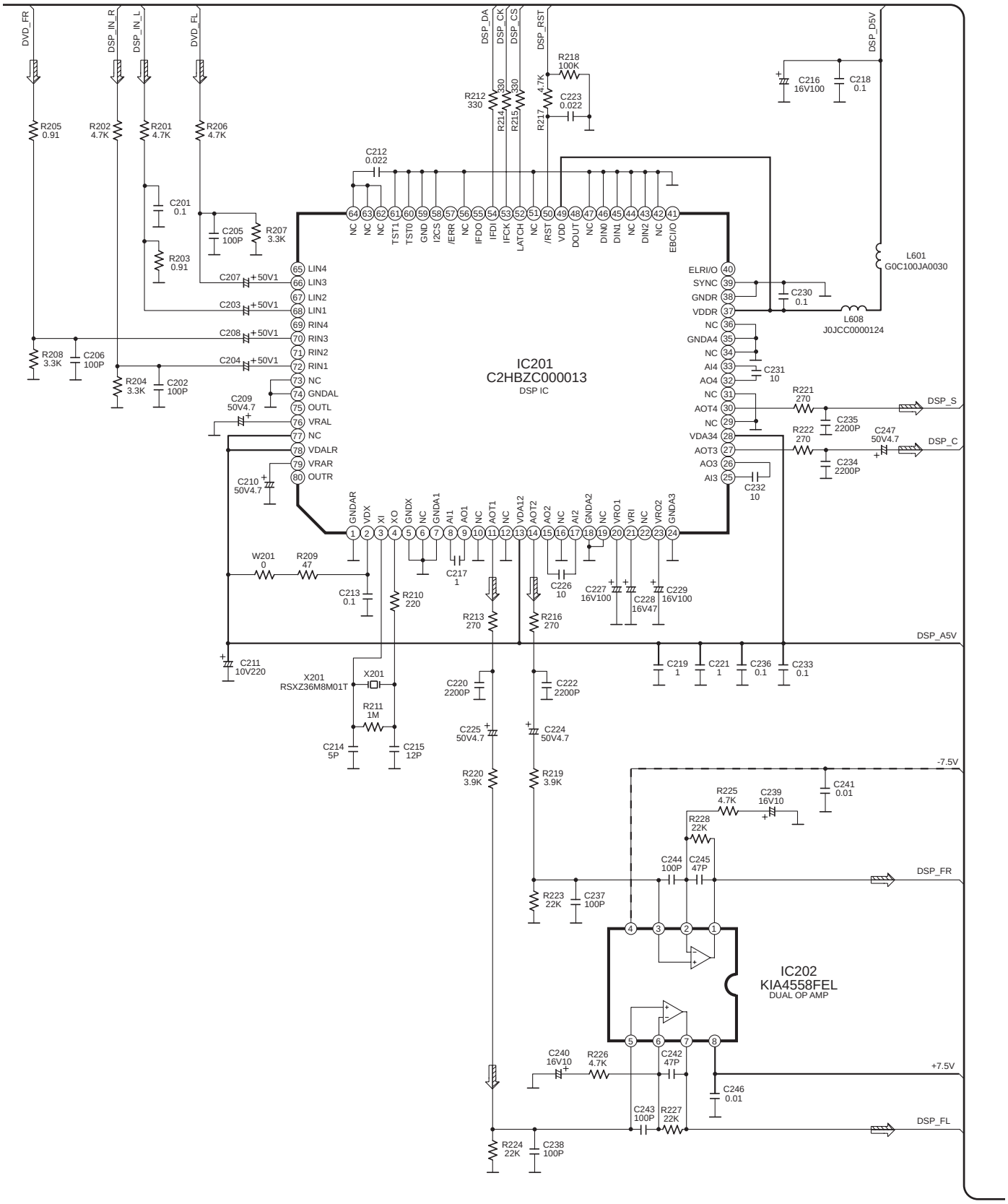
# SCHEMATIC DIAGRAM-22

## C DSP CIRCUIT

——— : +B SIGNAL LINE

– – – – : -B SIGNAL LINE

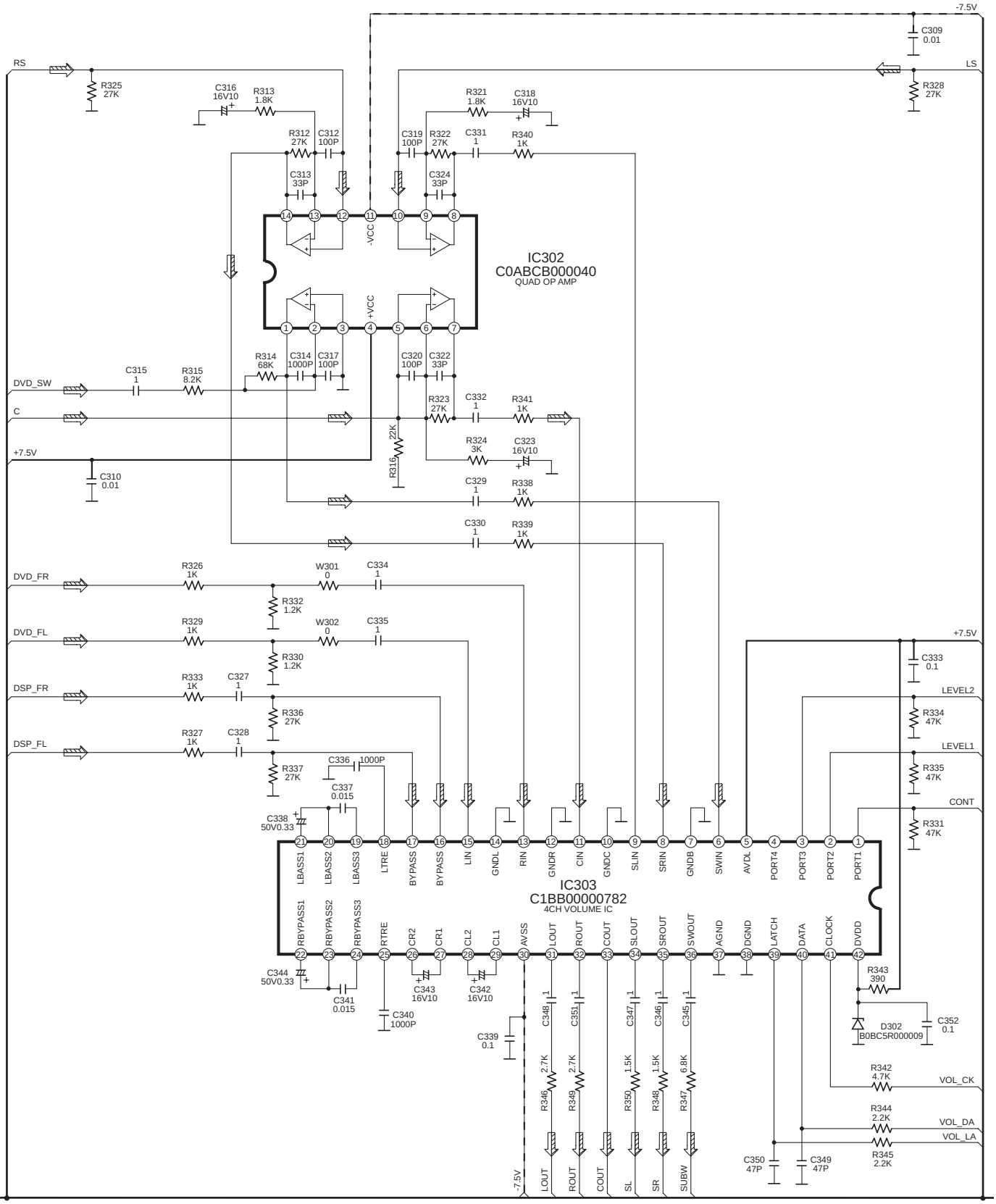
⇨ : MAIN SIGNAL LINE



# SCHEMATIC DIAGRAM-23

## C DSP CIRCUIT

: +B SIGNAL LINE
: -B SIGNAL LINE
: MAIN SIGNAL LINE



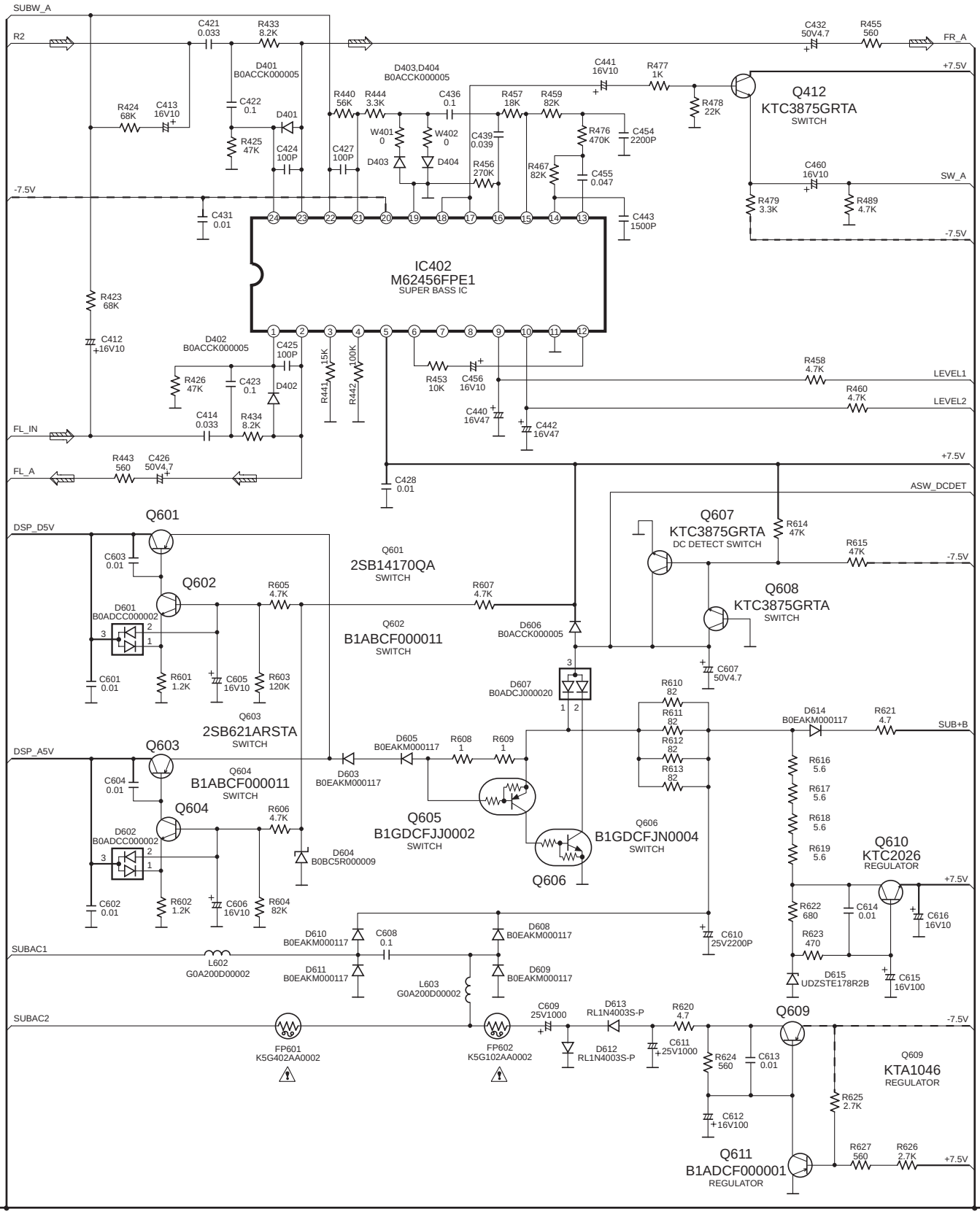
# SCHEMATIC DIAGRAM-24

## C DSP CIRCUIT

: +B SIGNAL LINE

: -B SIGNAL LINE

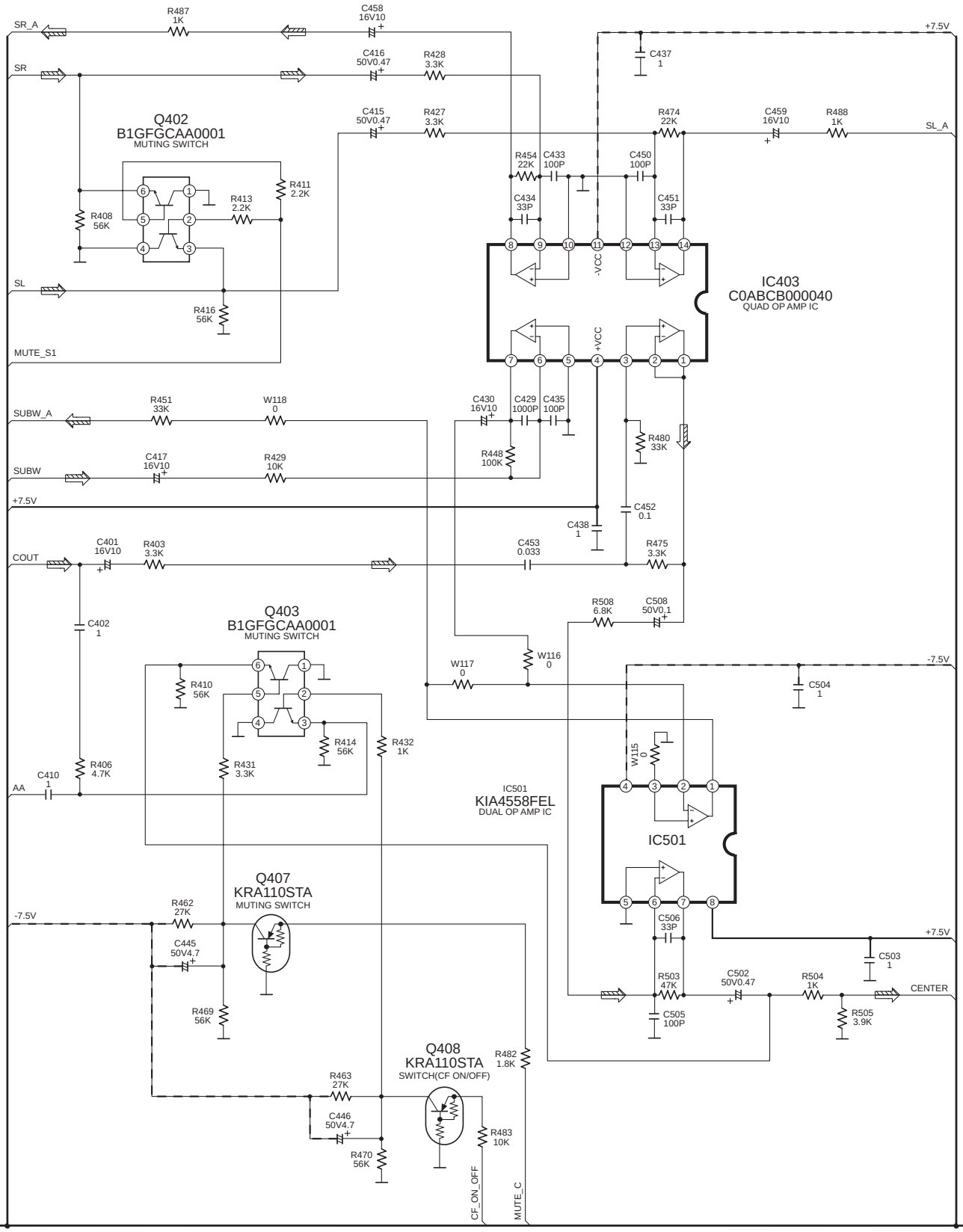
: MAIN SIGNAL LINE



# SCHEMATIC DIAGRAM-25

## C DSP CIRCUIT

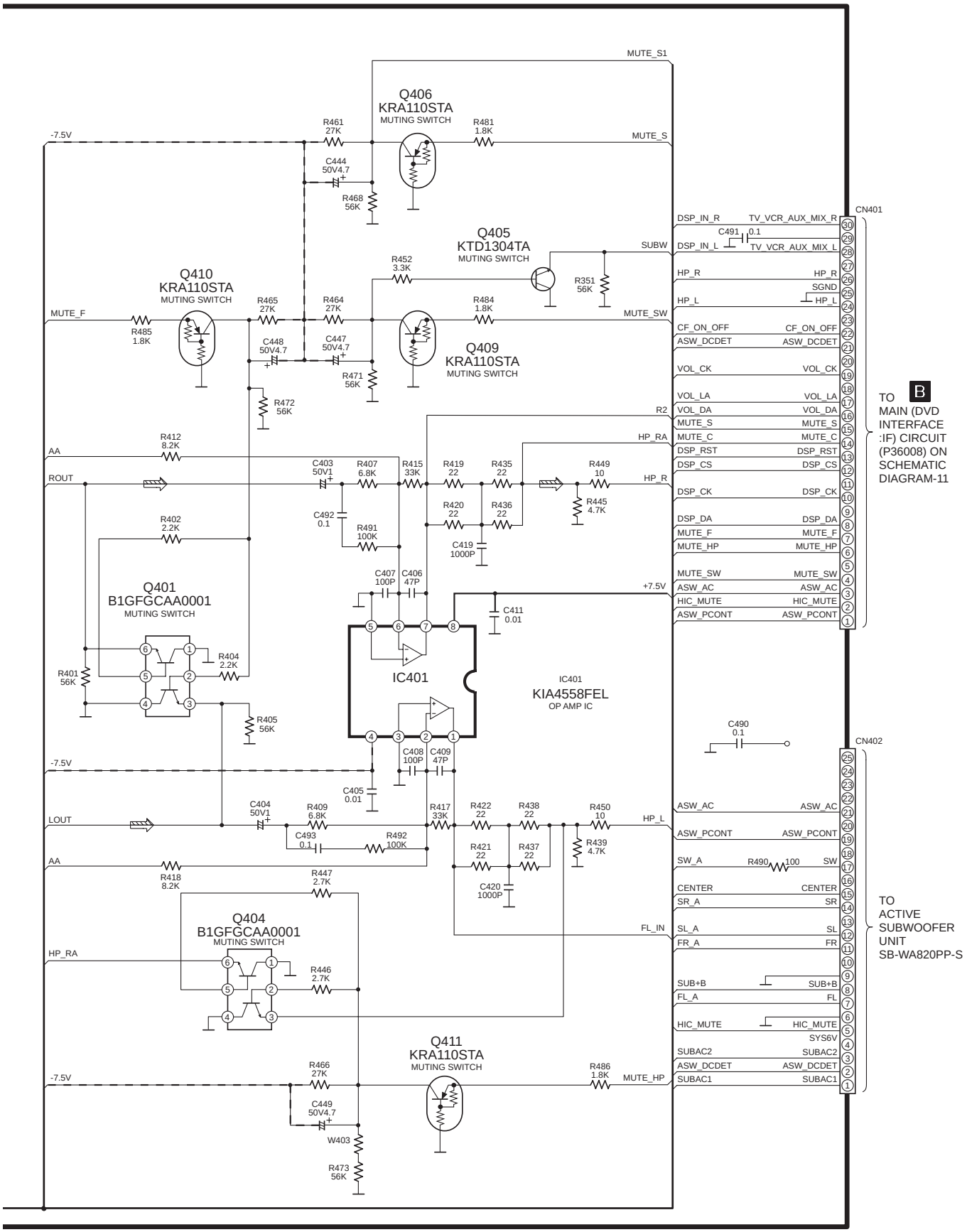
——— : +B SIGNAL LINE
– – – : -B SIGNAL LINE
⇨ : MAIN SIGNAL LINE



# SCHEMATIC DIAGRAM-26

## C DSP CIRCUIT

: +B SIGNAL LINE
: -B SIGNAL LINE
: MAIN SIGNAL LINE



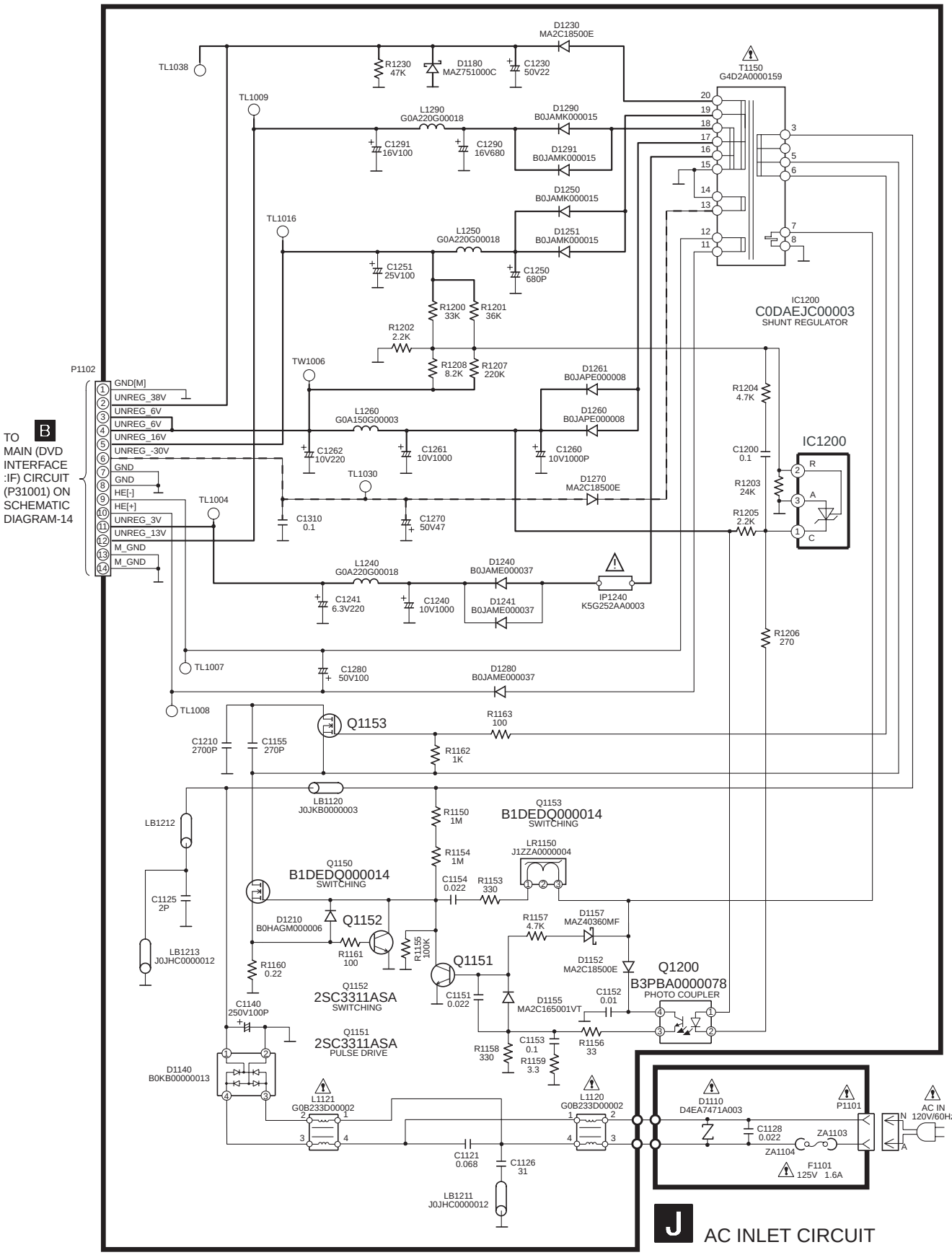
# 22.7. Power Circuit and AC Inlet

SCHEMATIC DIAGRAM-27

D POWER CIRCUIT

– – – : -B SIGNAL LINE

——— : +B SIGNAL LINE



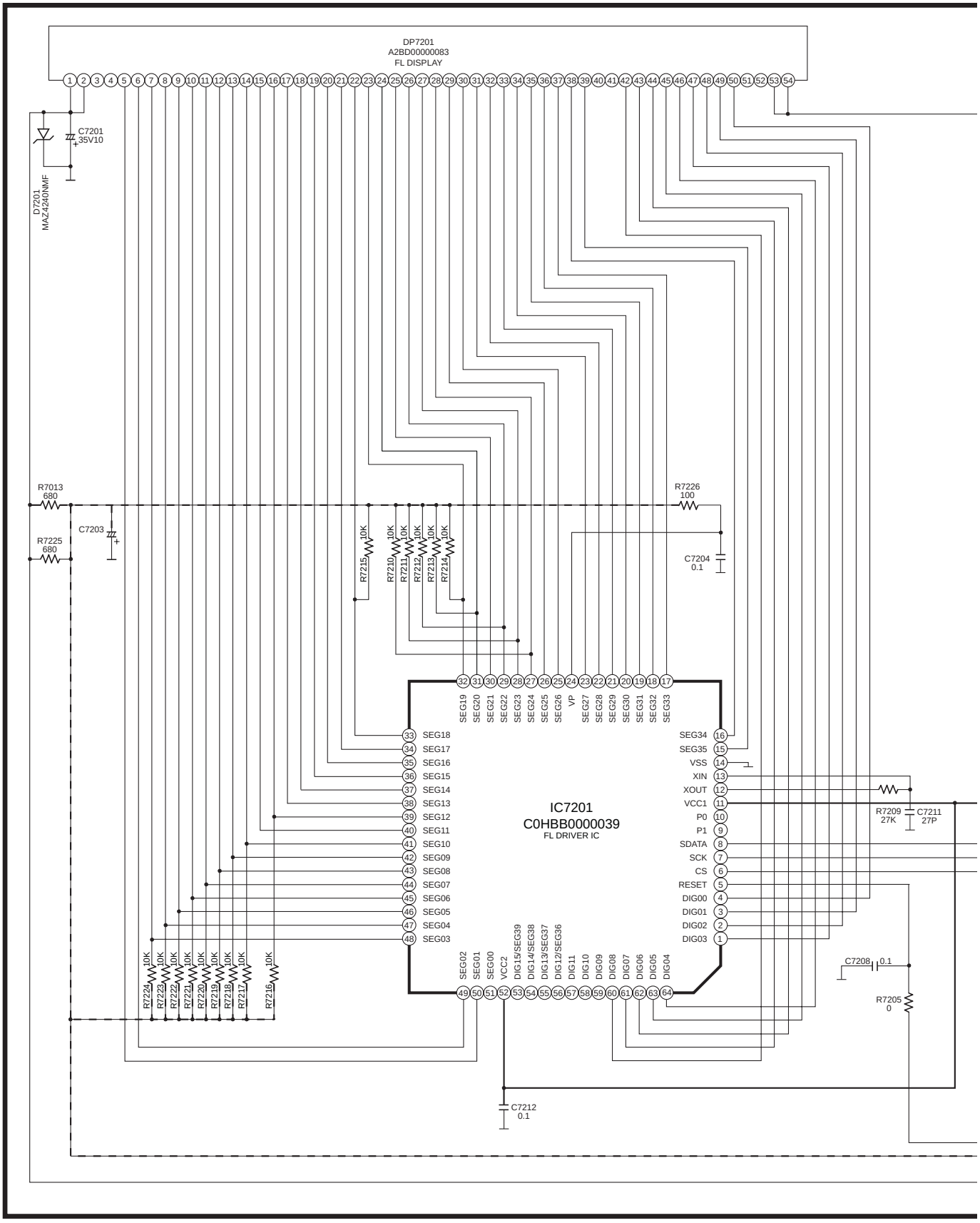
# 22.8. Panel B Circuit

SCHEMATIC DIAGRAM-28

E PANEL B CIRCUIT

——— : +B SIGNAL LINE

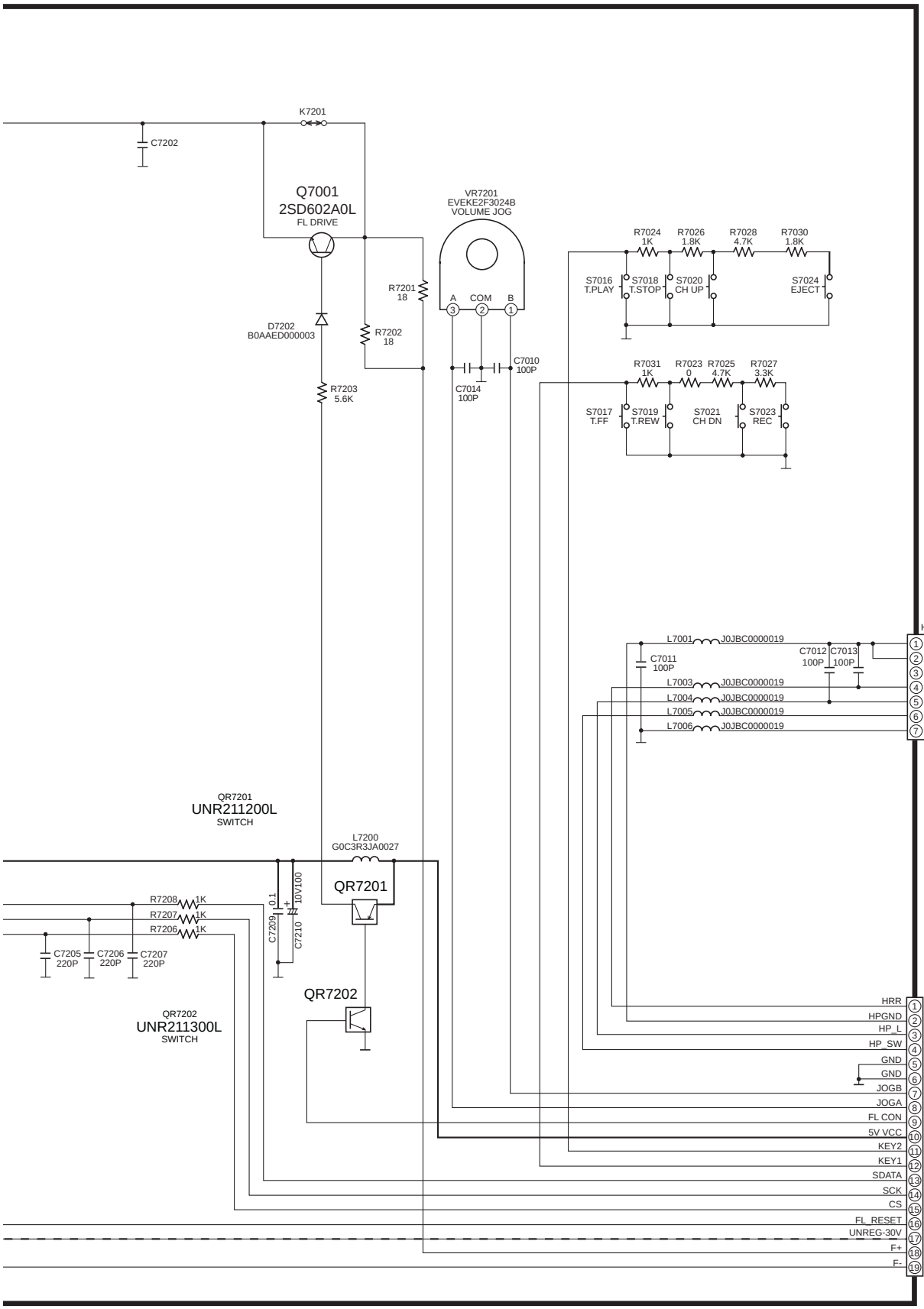
– – – : -B SIGNAL LINE



# SCHEMATIC DIAGRAM-29

## E PANEL B CIRCUIT

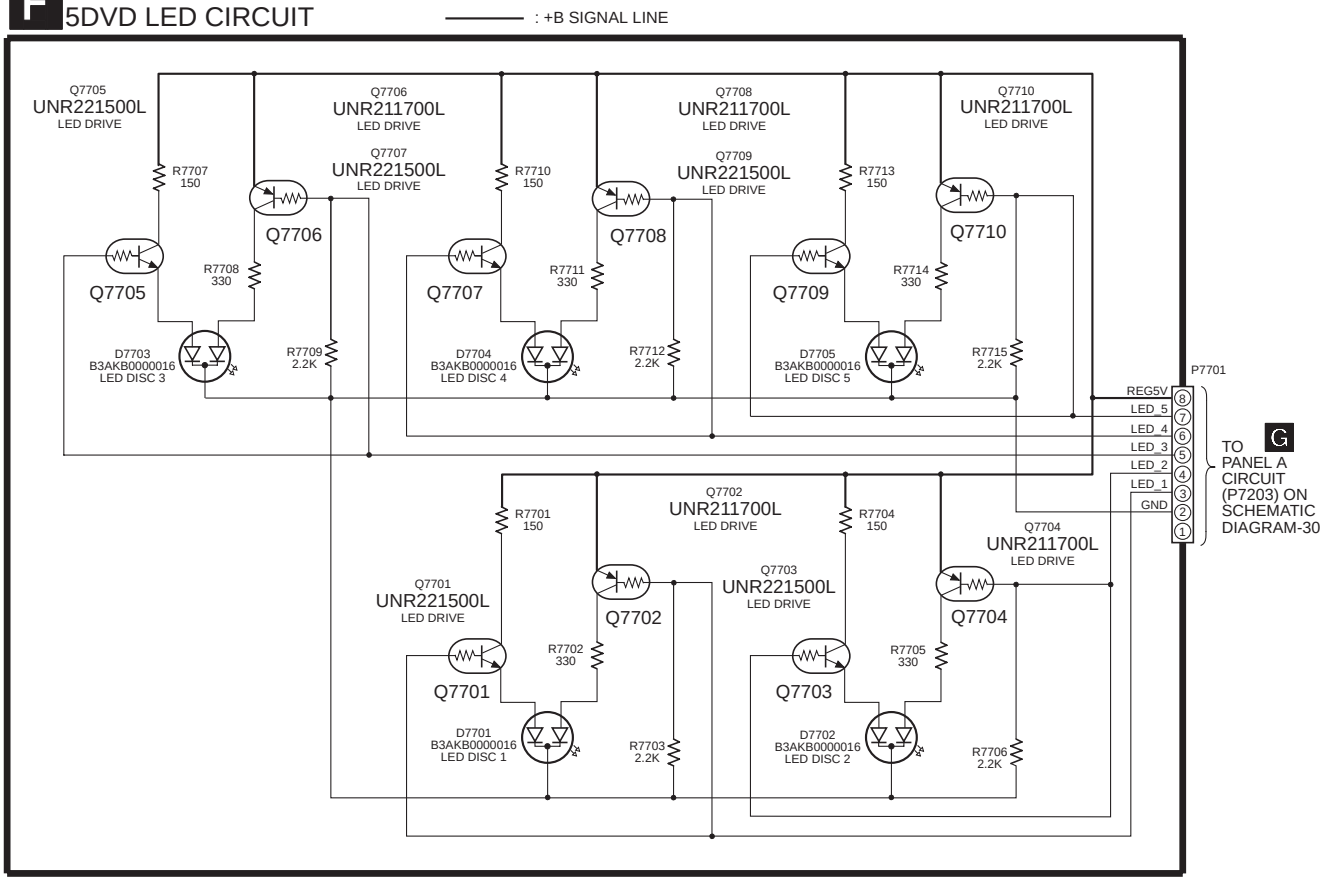
——— : +B SIGNAL LINE
– – – : -B SIGNAL LINE



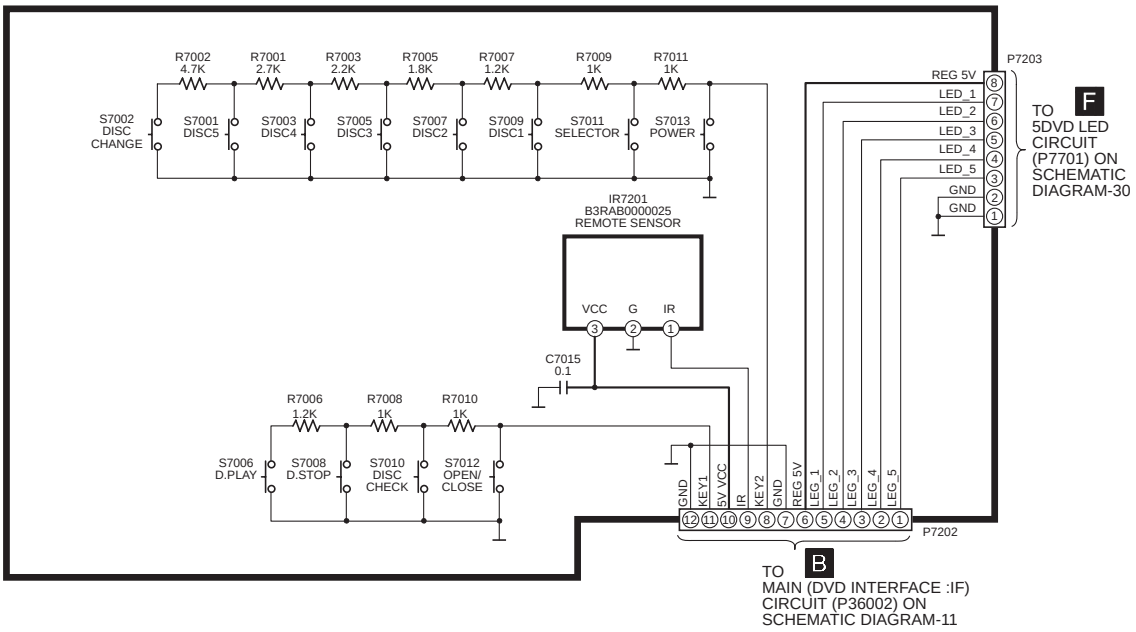
# 22.9. 5DVD LED Circuit and Panel A Circuit

SCHEMATIC DIAGRAM-30

## F 5DVD LED CIRCUIT

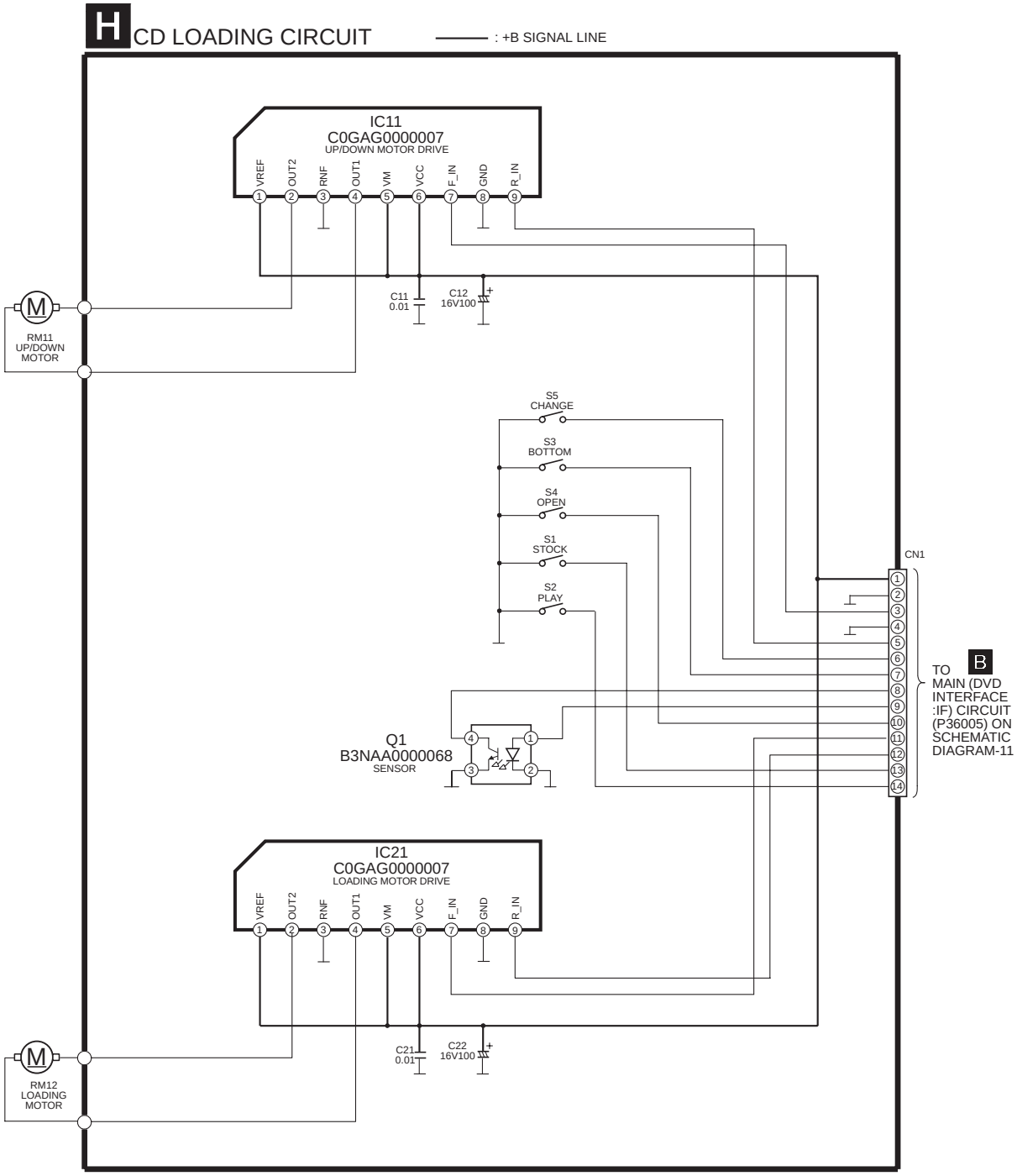



## G PANEL A CIRCUIT



# 22.10. CD Loading Circuit

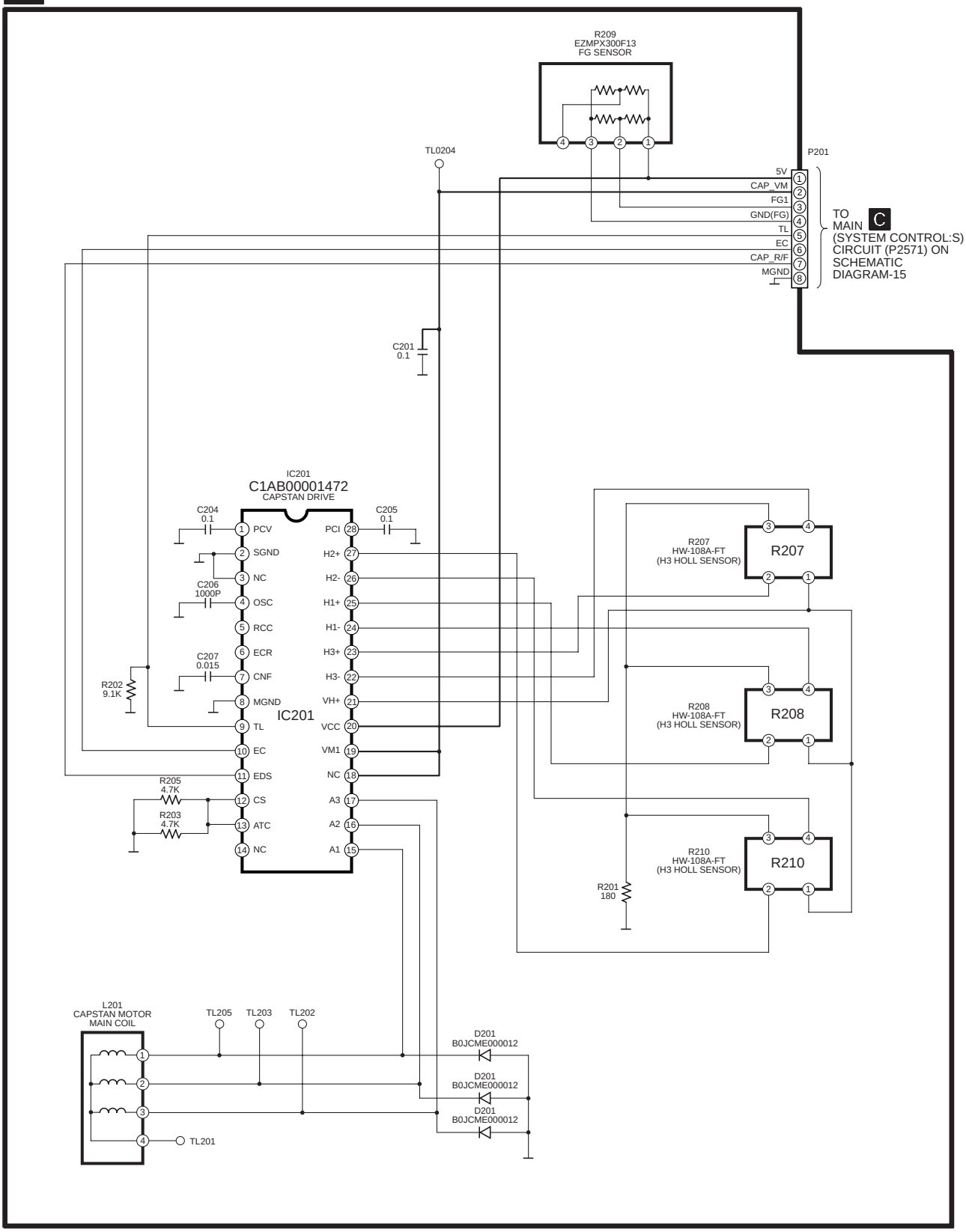
SCHEMATIC DIAGRAM-31



# 22.11. VCR Deck Circuit

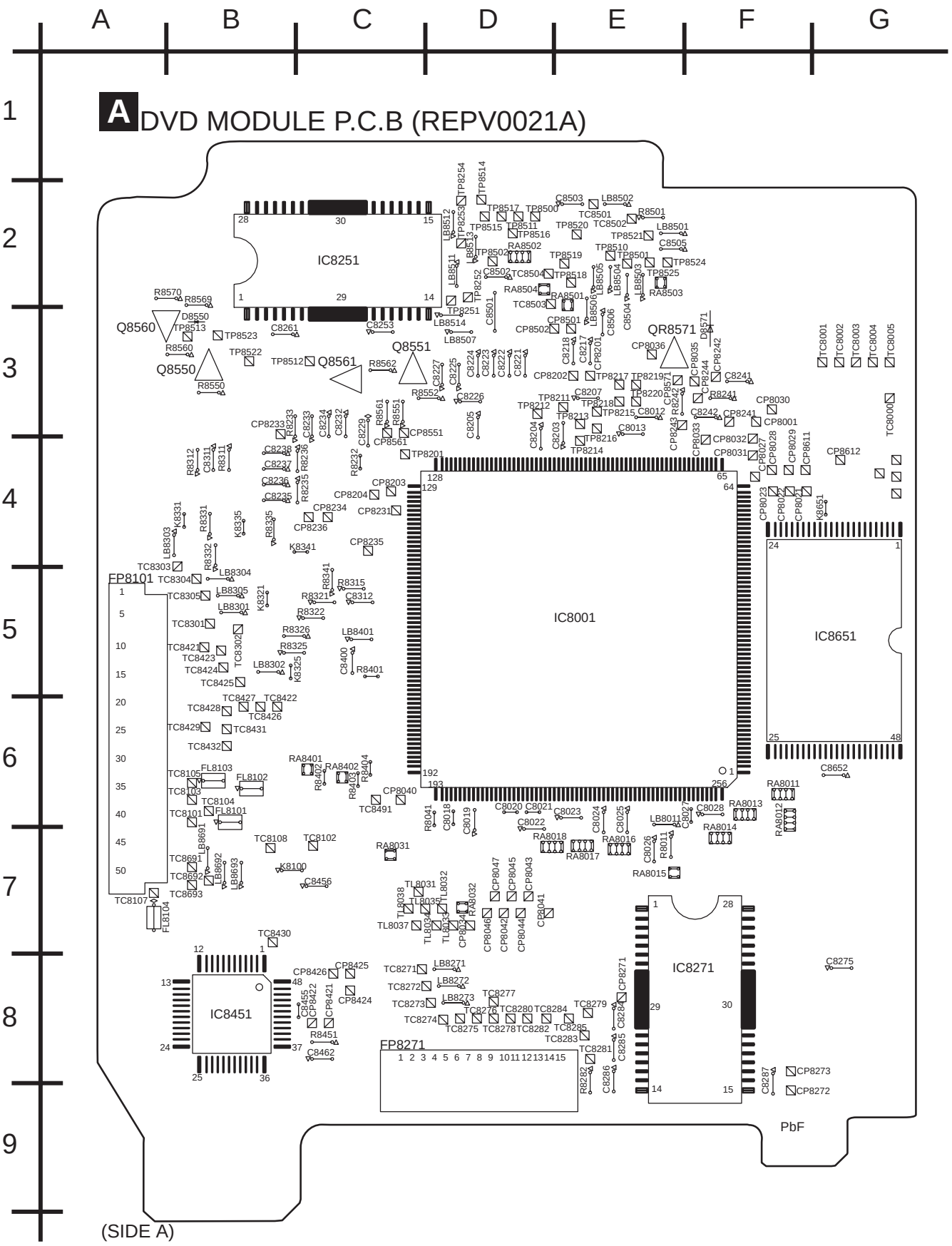
SCHEMATIC DIAGRAM - 32

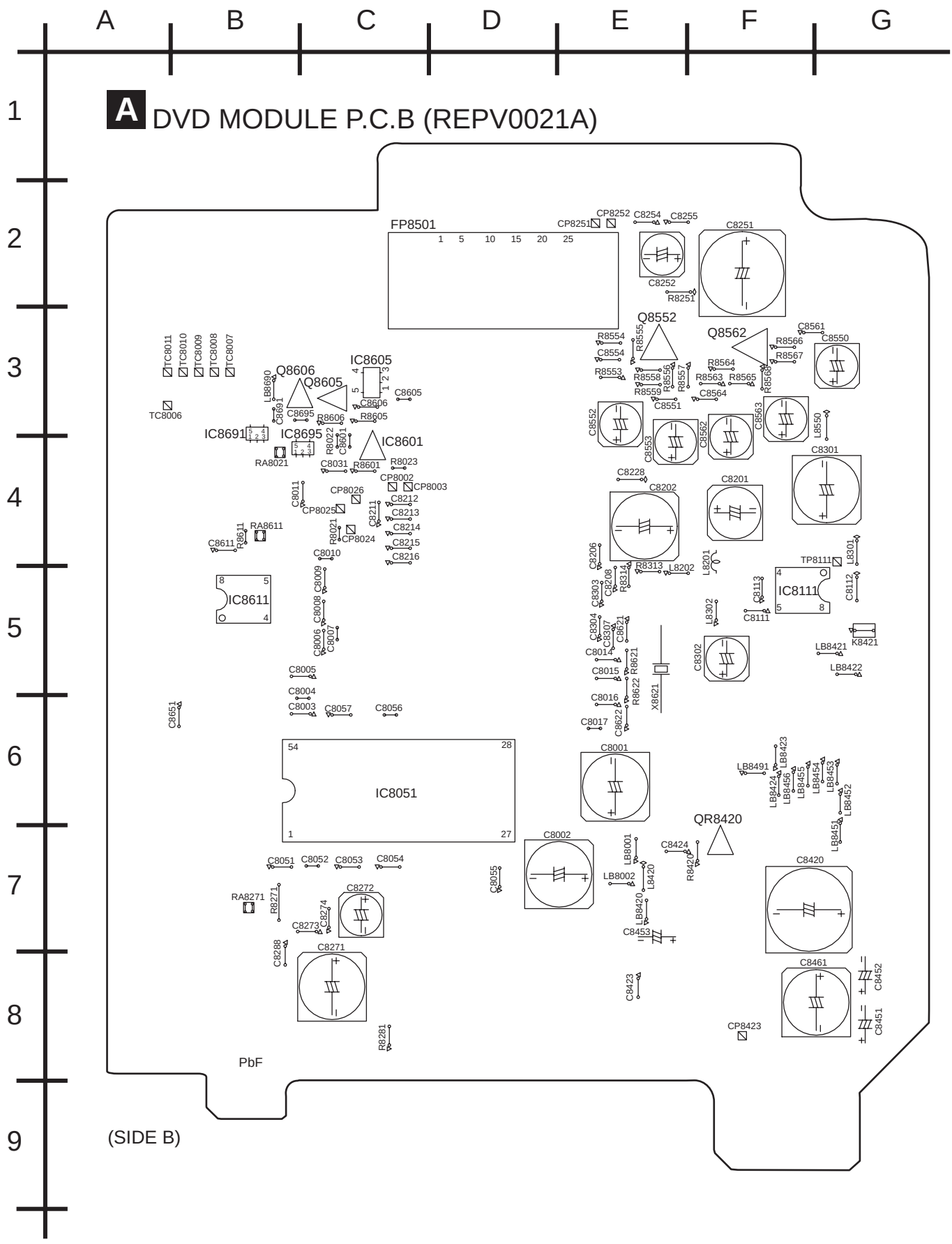
I VCR DECK CIRCUIT ——— : +B SIGNAL LINE



# 23 Printed Circuit Board

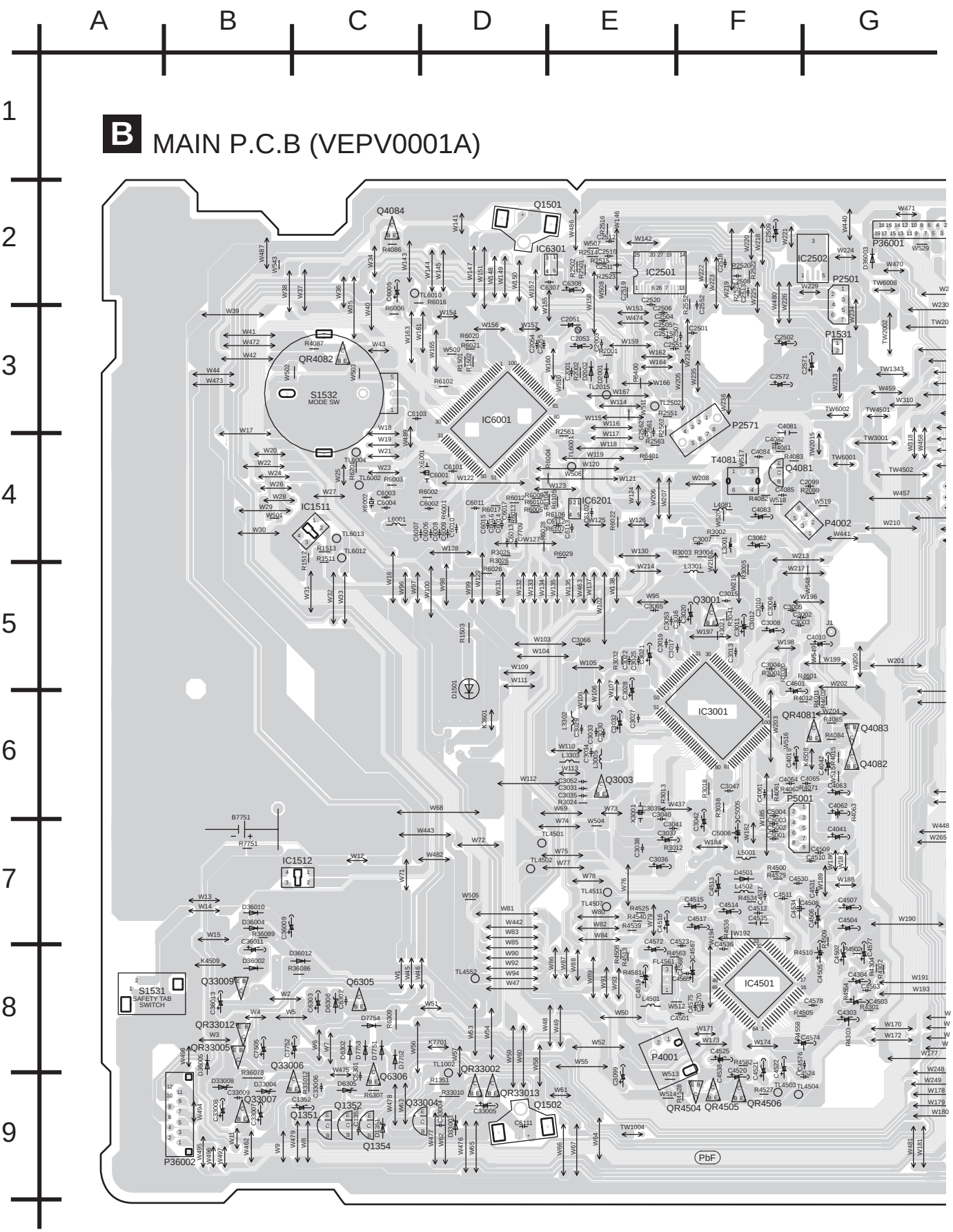
## 23.1. DVD Module P.C.B. (Side A and Side B)



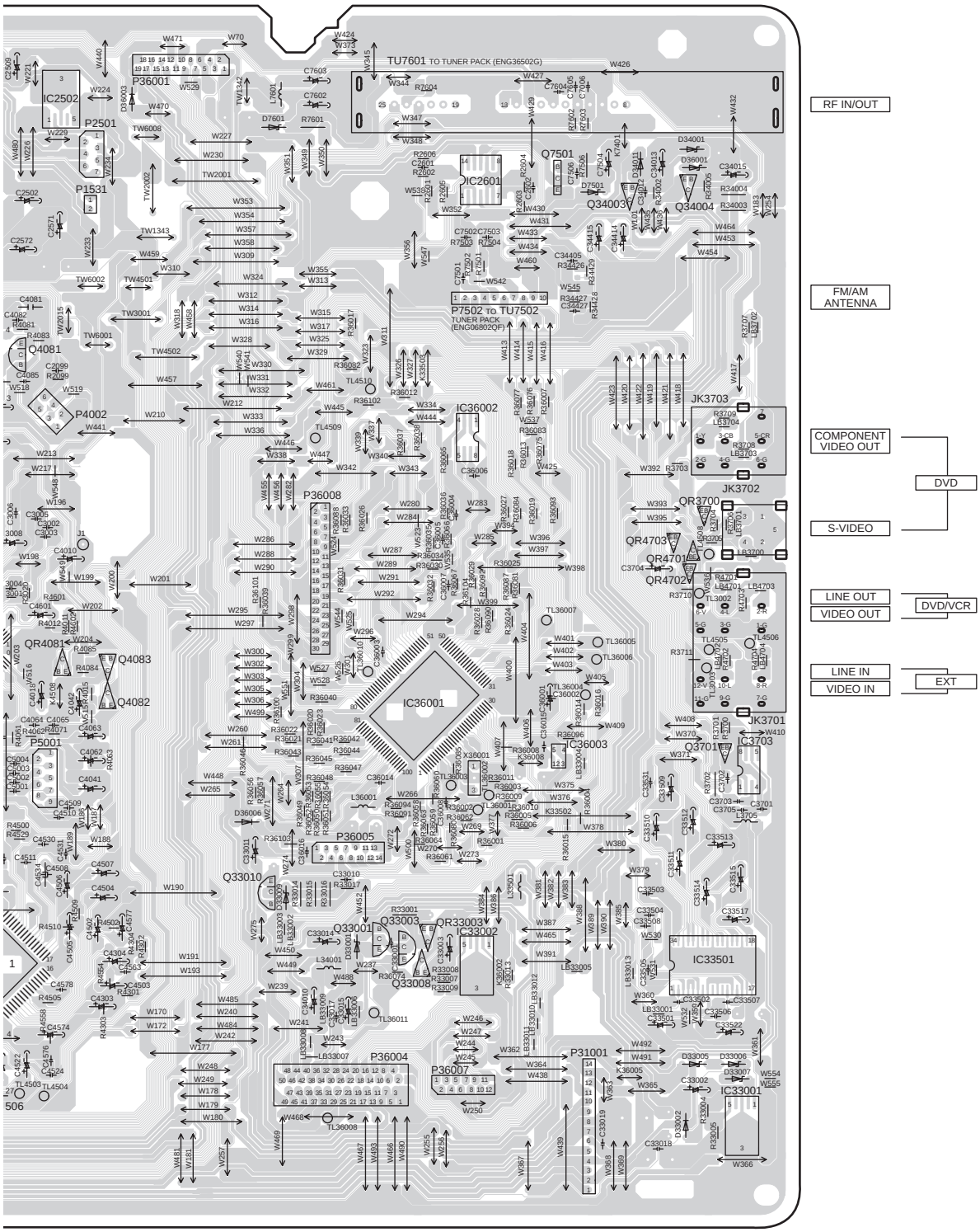

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
A DVD MODULE P.C.B (REPV0021A)
FP8501
IC8605
Q8606
Q8605
IC8691
IC8695
IC8601
IC8611
IC8051
IC8111
Q8552
Q8562
QR8420
PbF
(SIDE B)

## 23.2. Main P.C.B.

**B** MAIN P.C.B (VEPV0001A)

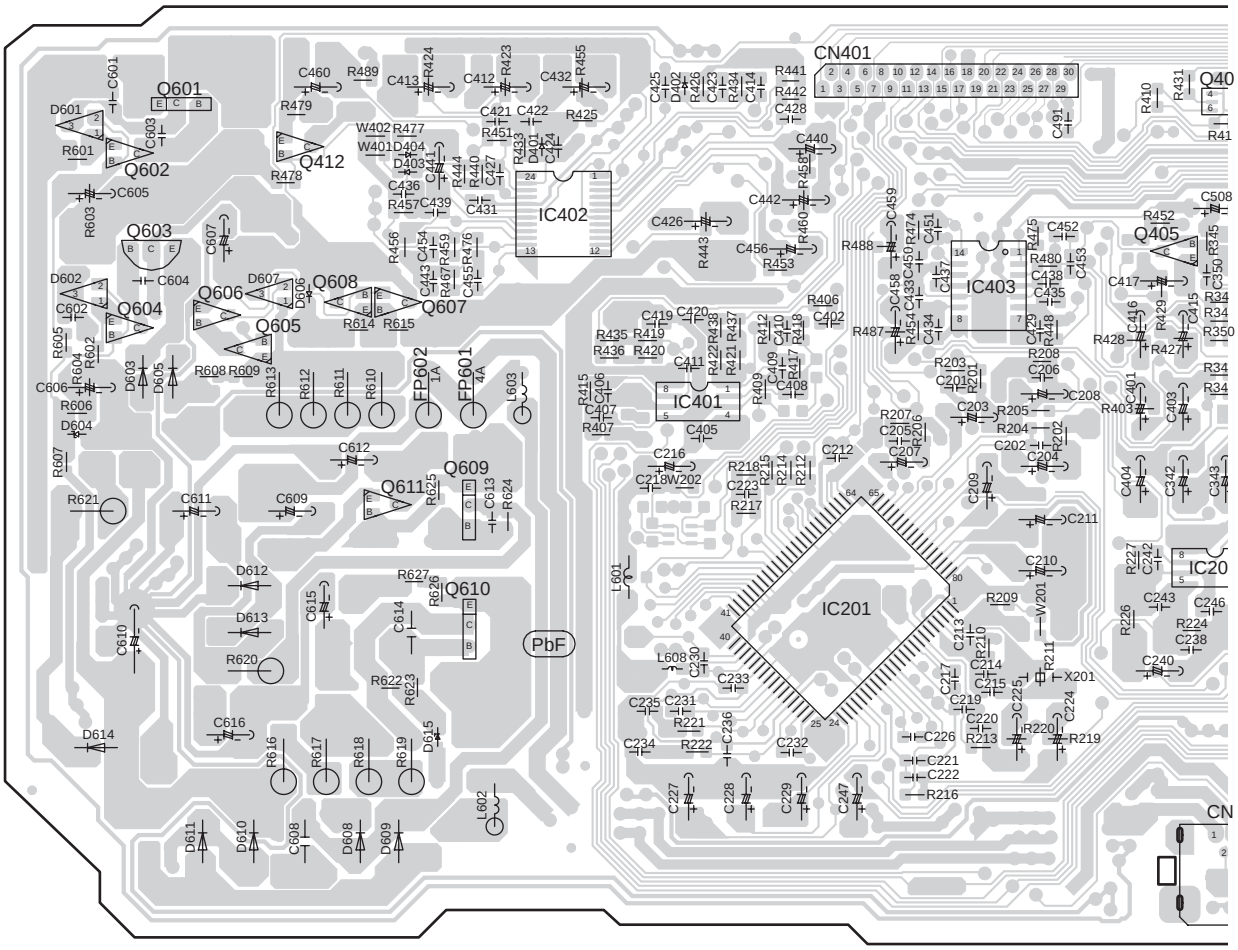


G H I J K L M


TU7601 TO TUNER PACK (ENG36502G)
P7502 TO TU7502
TUNER PACK
(ENG06802QP)
RF IN/OUT
FM/AM
ANTENNA
COMPONENT
VIDEO OUT
DVD
S-VIDEO
LINE OUT
VIDEO OUT
DVD/VCR
LINE IN
VIDEO IN
EXT
JK3703
JK3702
JK3701
IC36001
IC36002
IC33001
IC33501
IC2601
IC3703
Q7501
Q4081
Q4083
Q4082
Q33010
Q33001
Q33003
Q33008
Q34003
Q34004
Q3701
P36001
P36008
P36005
P36004
P36007
P31001
P2501
P1531
P4002
P5001
IC2502

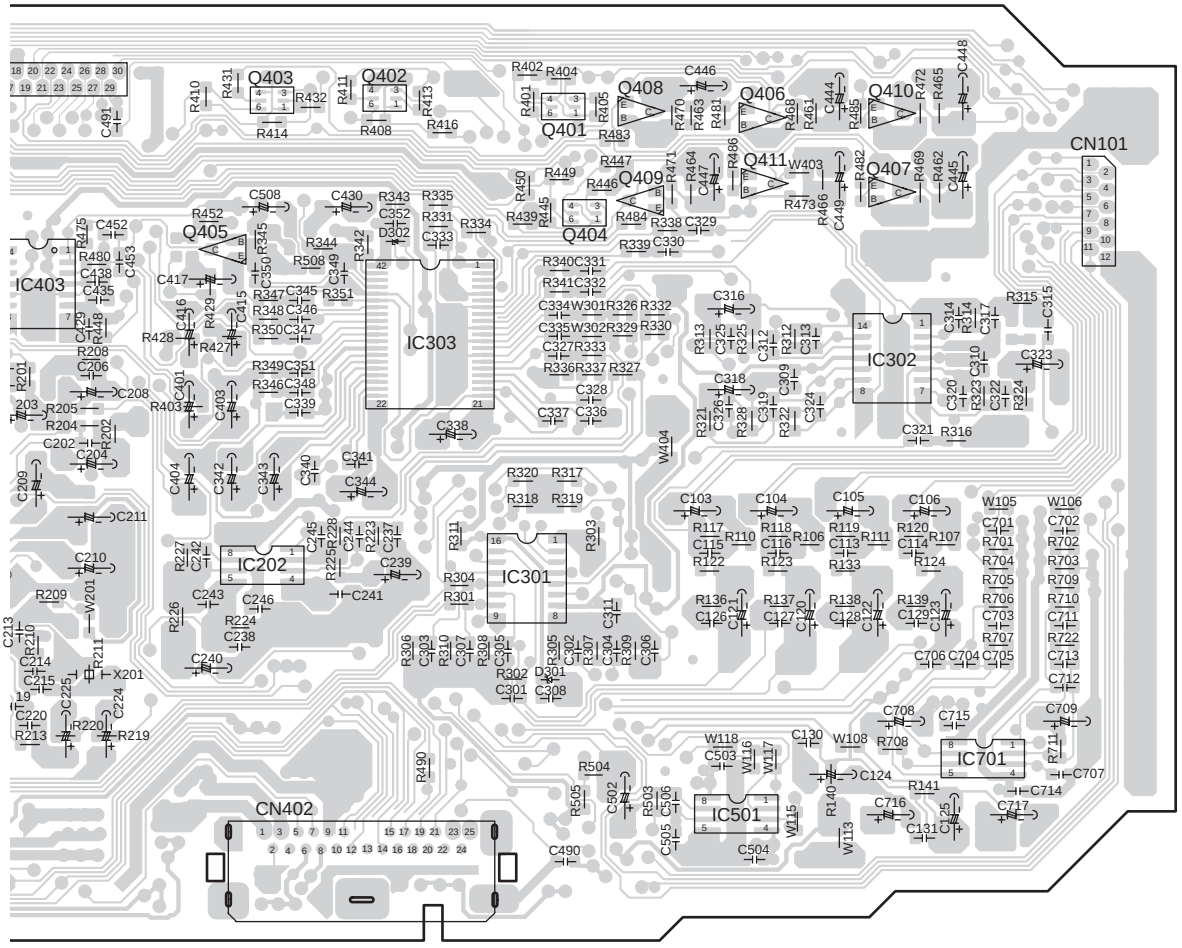
## 23.3. DSP P.C.B. (Side A and Side B)

**C** DSP P.C.B (VEPV0002A)




(SIDE A)

G H I J K L M

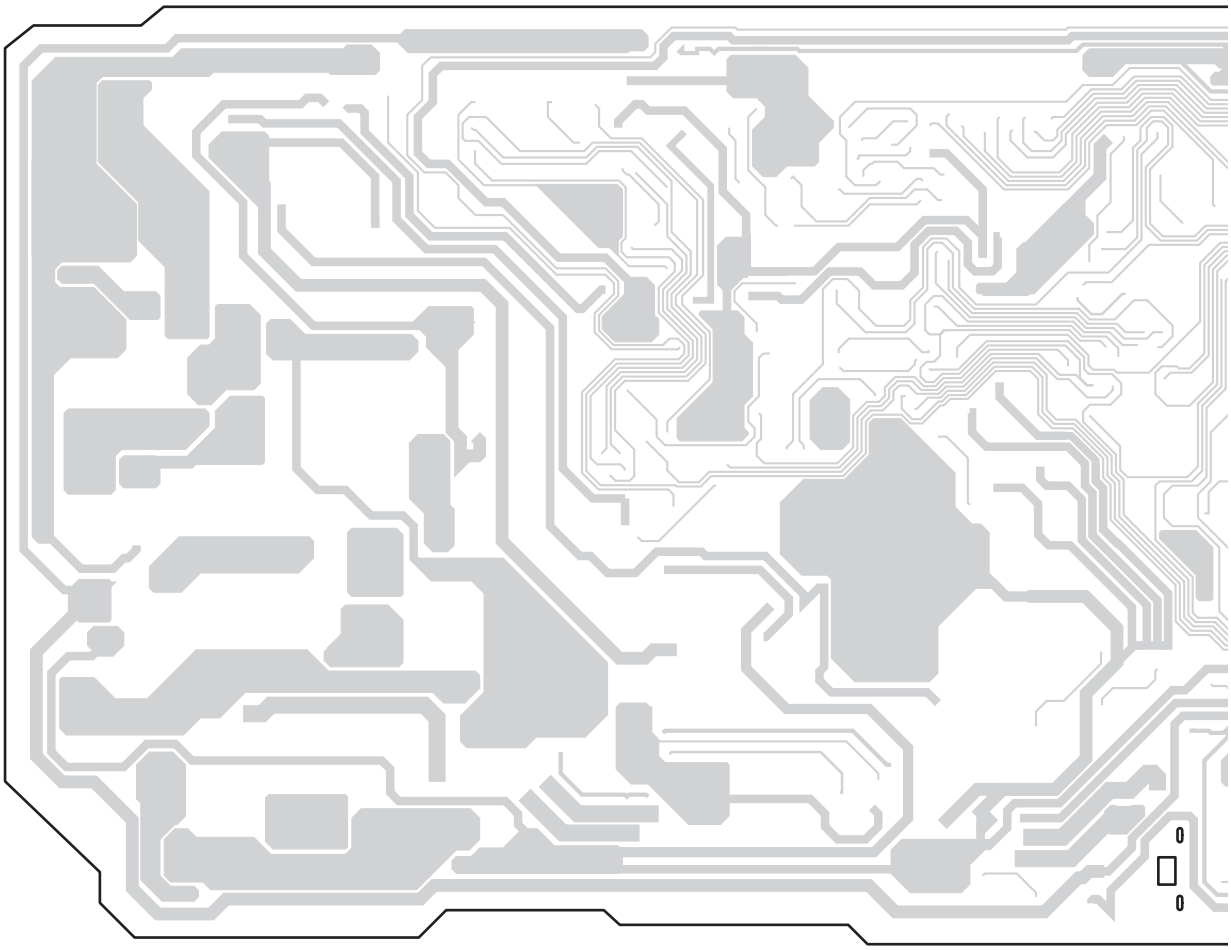



TO ACTIVE SUBWOOFER UNIT

A B C D E F G

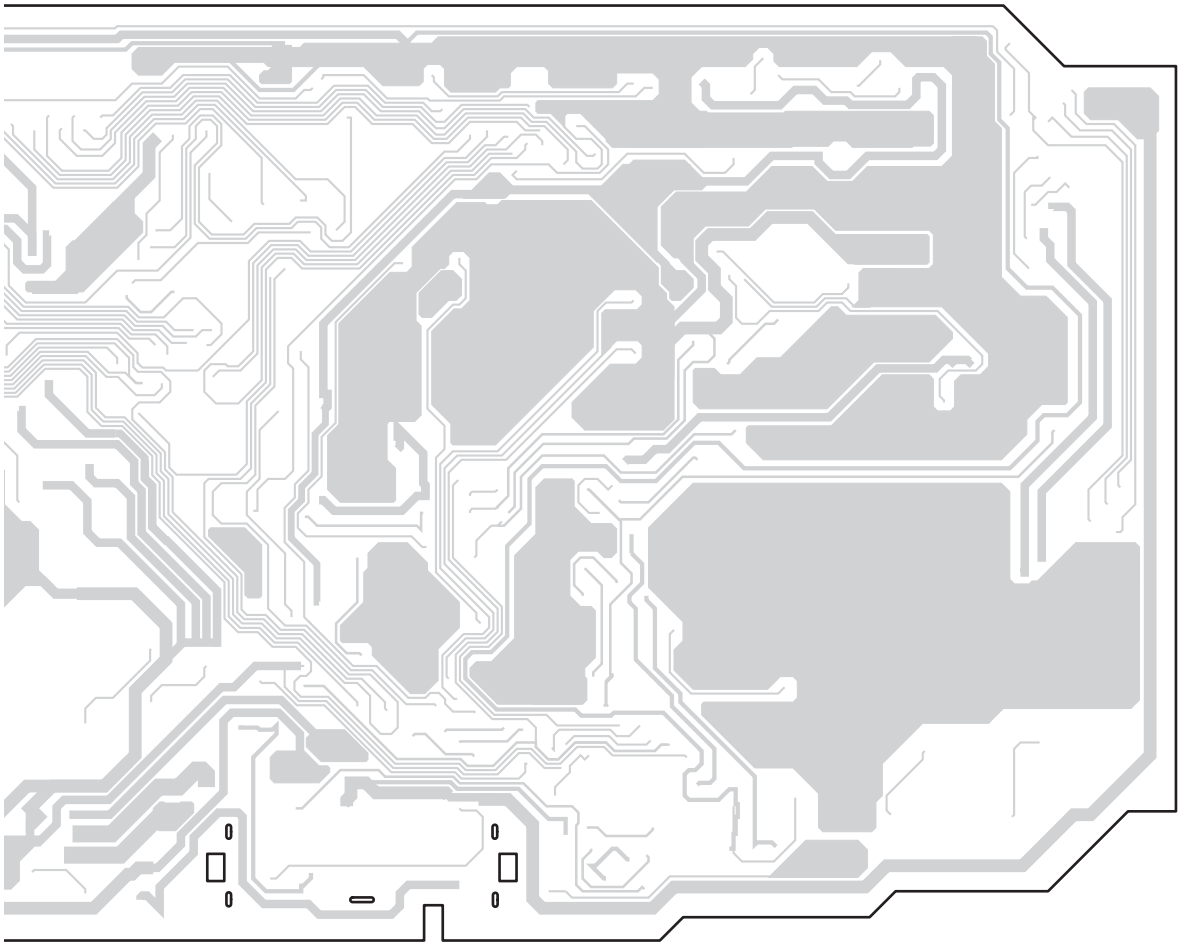
1 2 3 4 5 6 7 8 9

## C DSP P.C.B (VEPV0002A)



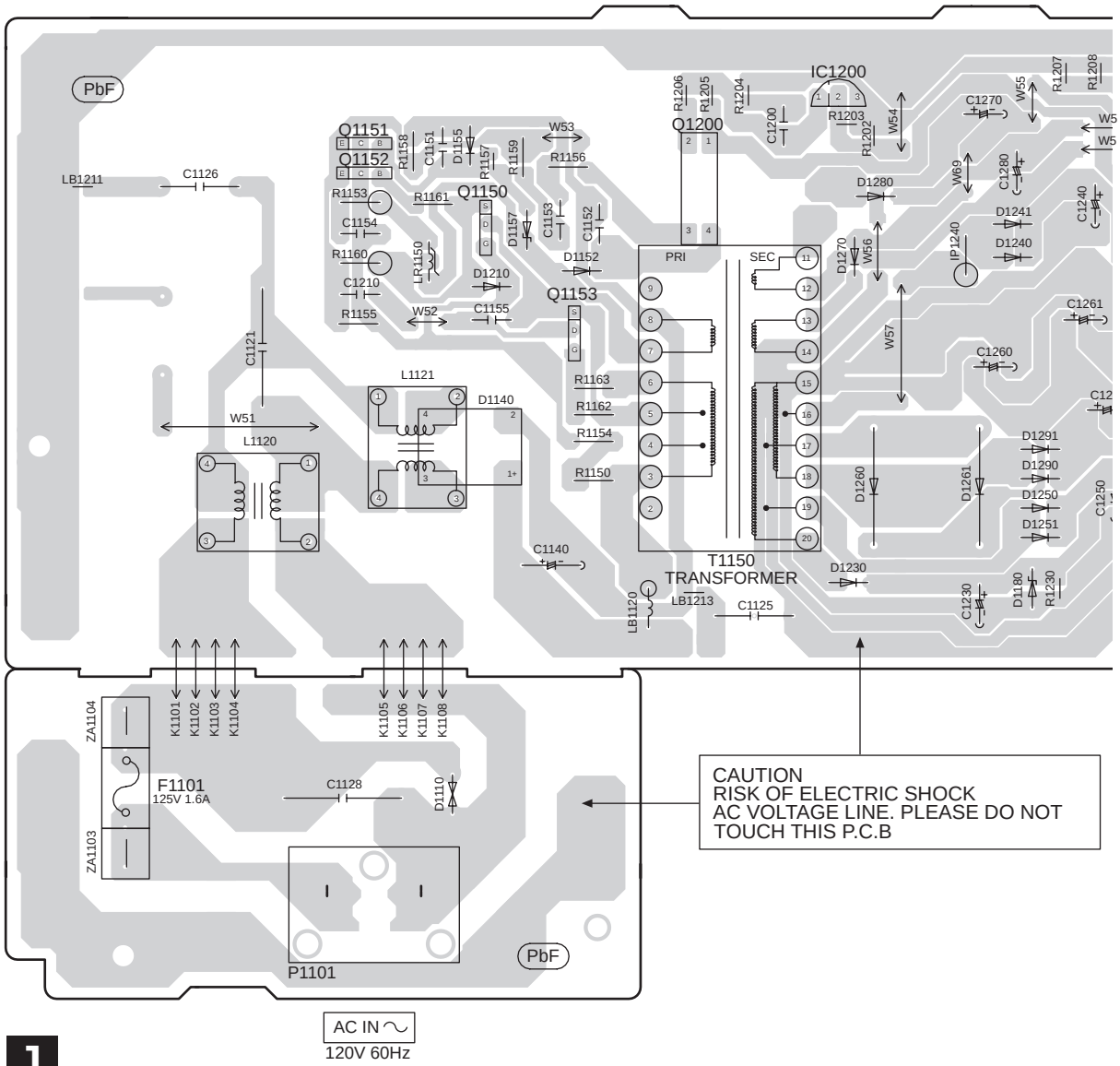
(SIDE B)

G H I J K L M



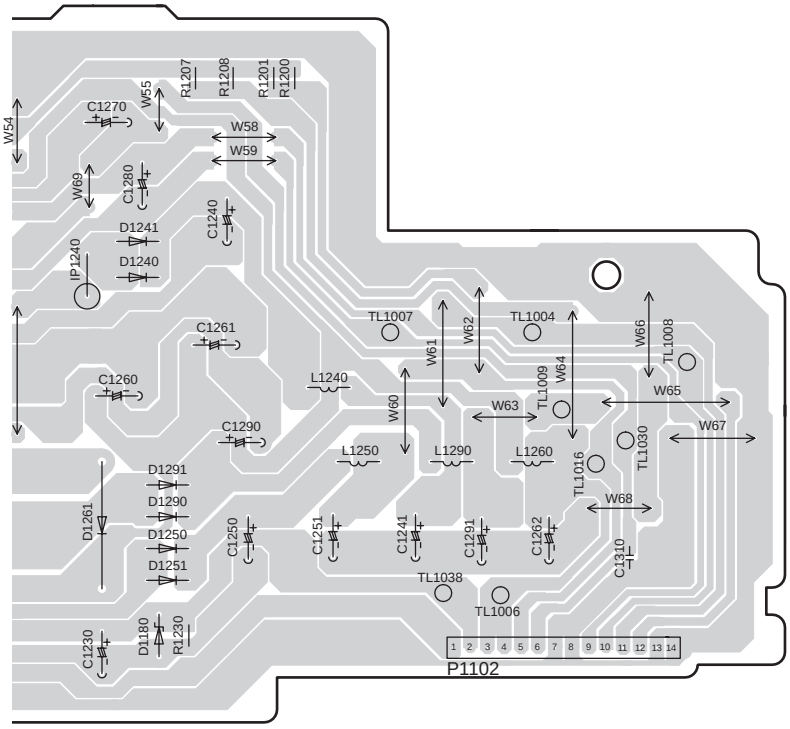
## 23.4. Power P.C.B. and AC Inlet P.C.B.

**D** POWER P.C.B (VEPV0004A)



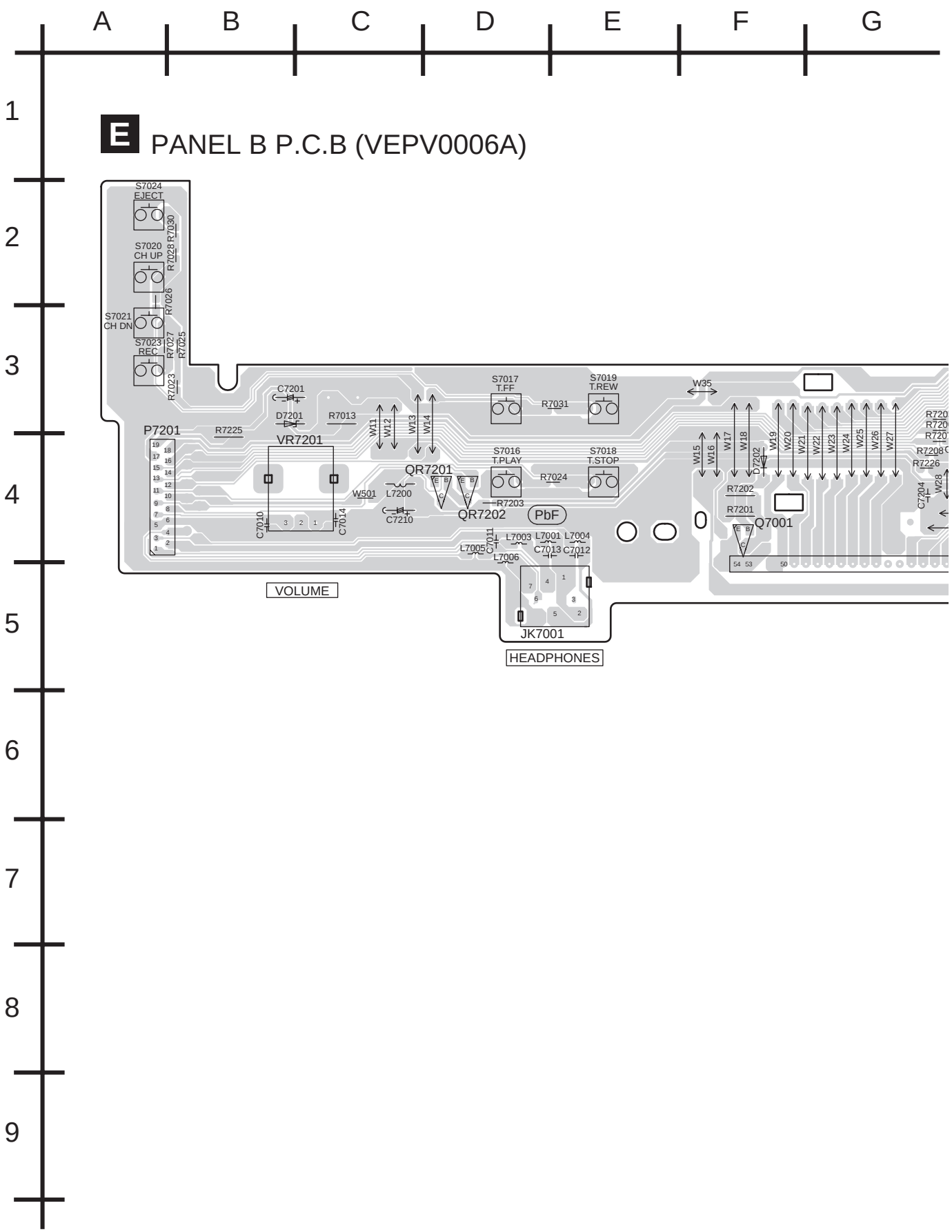

**J** AC INLET P.C.B (VEPV0003A)

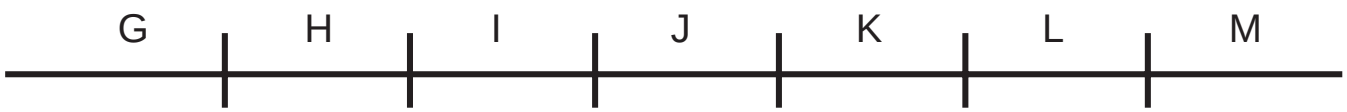
G H I J K L M




SHOCK
PLEASE DO NOT

## 23.5. Panel B P.C.B.

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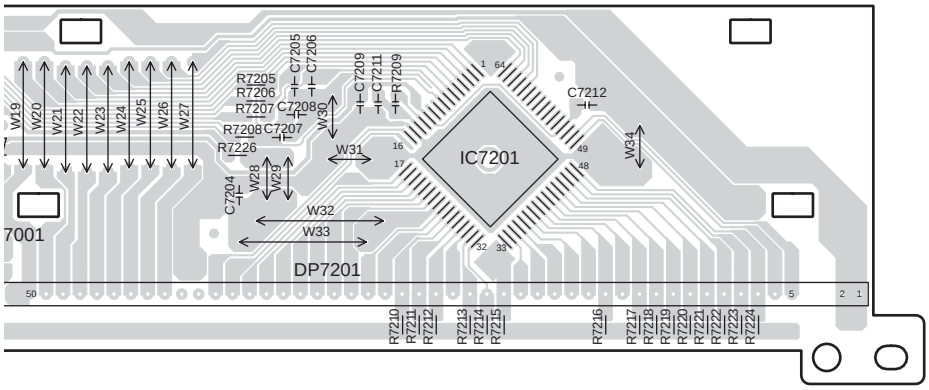
W19
W20
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W23
W24
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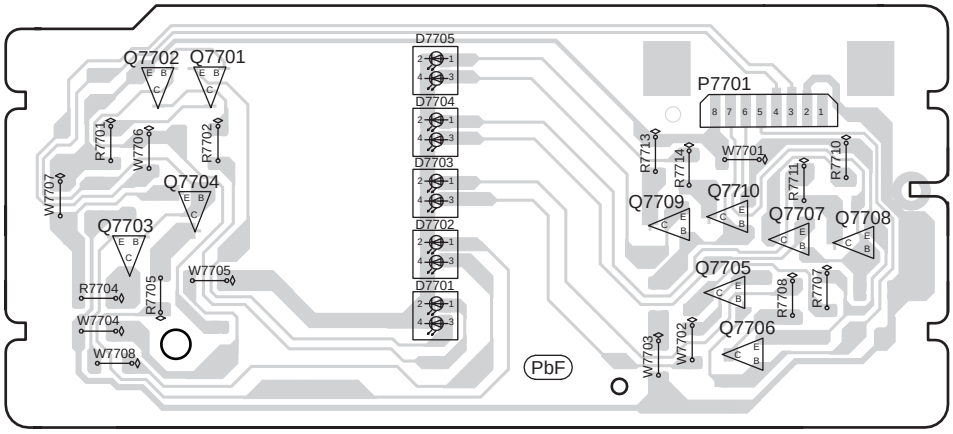
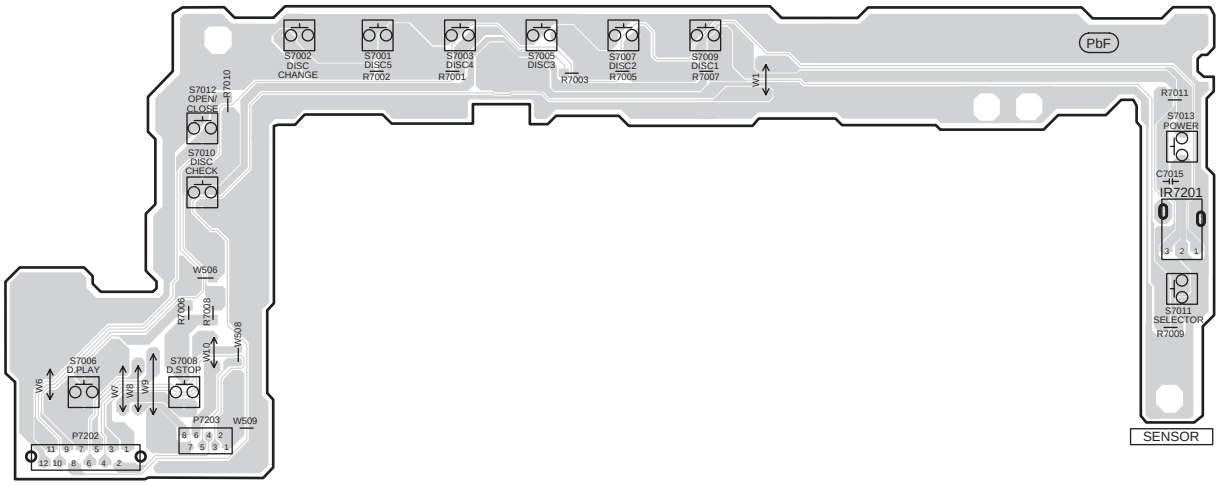
W26
W27
R7205
R7206
R7207
R7208
R7226
C7205
C7206
C7207
C7208
W30
W31
C7209
C7211
R7209
C7212
W34
IC7201
1
64
16
17
49
48
32
33
C7204
W28
W29
W32
W33
7001
DP7201
50
5
2
1
R7210
R7211
R7212
R7213
R7214
R7215
R7216
R7217
R7218
R7219
R7220
R7221
R7222
R7223
R7224

## 23.6. 5 DVD Led P.C.B. and Panel A P.C.B.

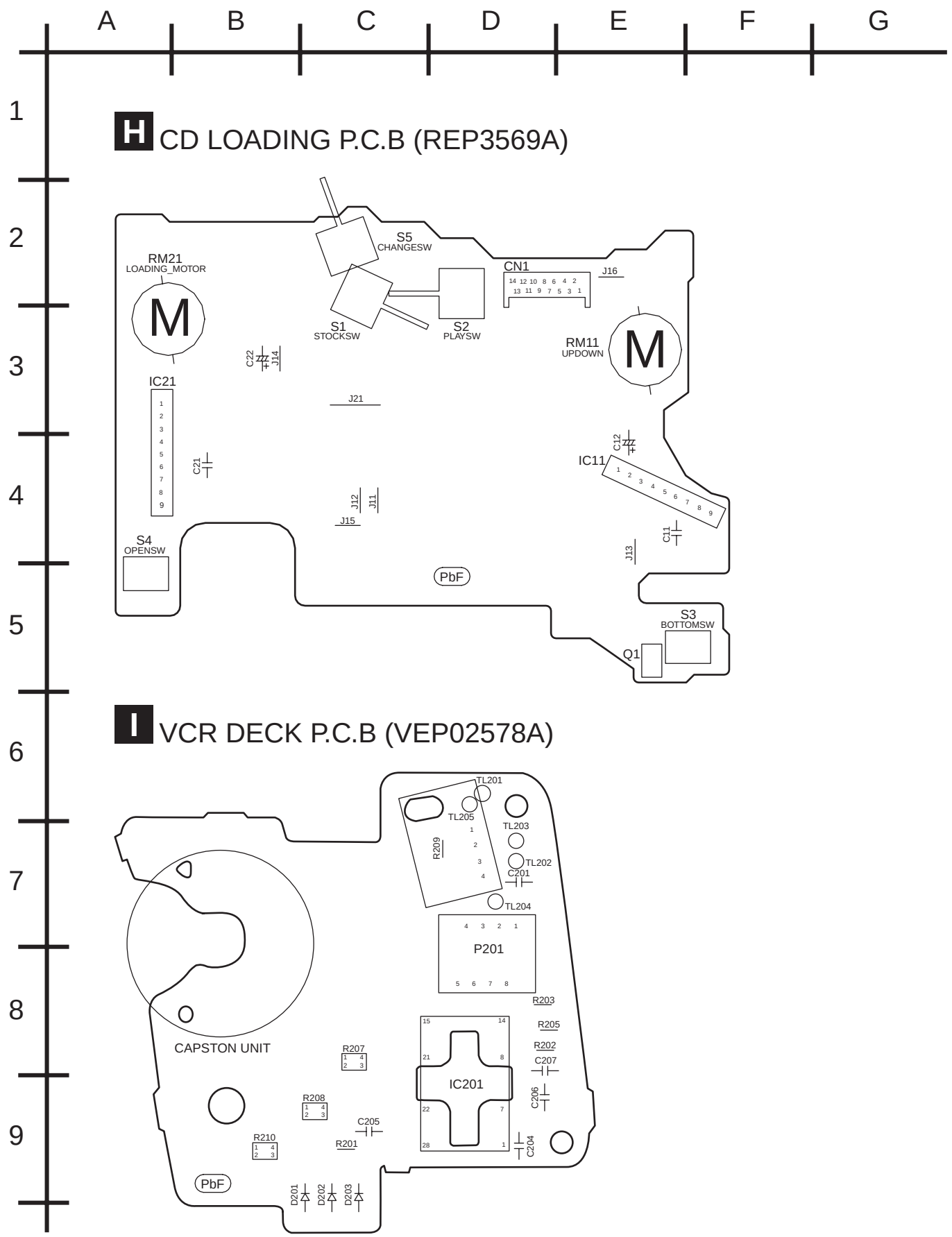
**F** 5 DVD LED P.C.B (VEPV0007A)



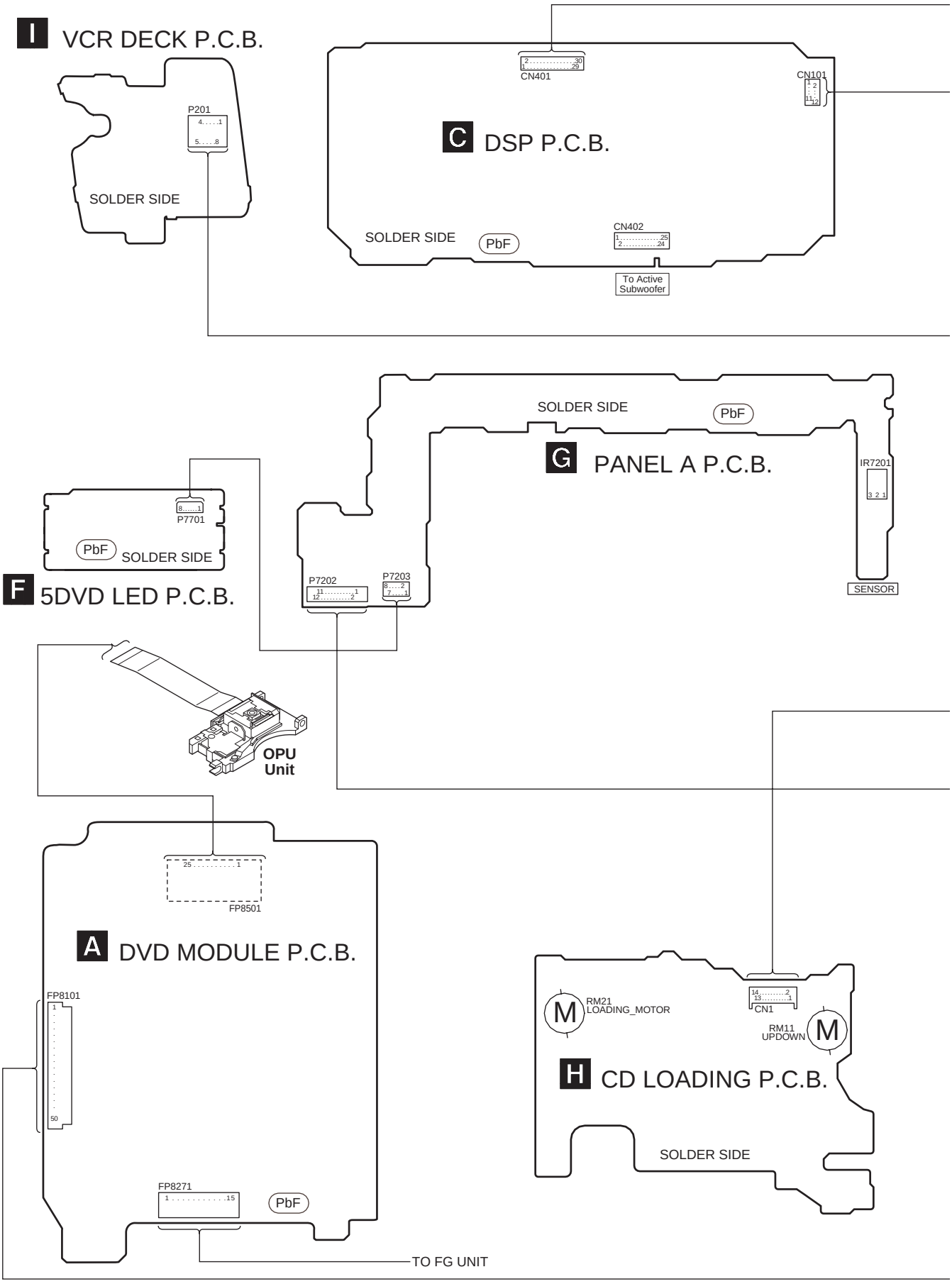

**G** PANEL A P.C.B (VEPV0005A)

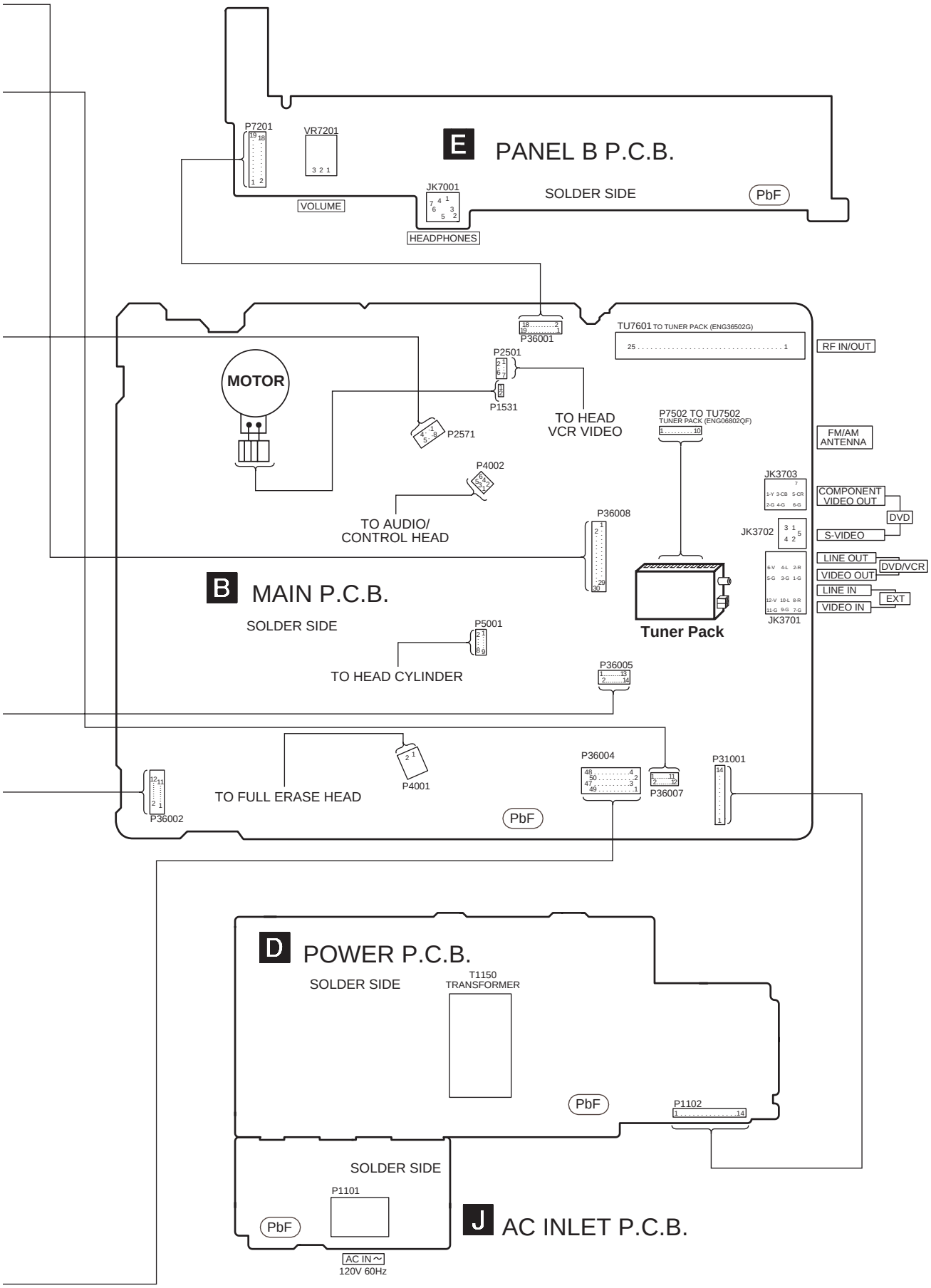


## 23.7. CD Loading P.C.B. and VCR Deck P.C.B.



# 24 Wiring Connection Diagram




E PANEL B P.C.B.
P7201
VR7201
VOLUME
JK7001
HEADPHONES
SOLDER SIDE
PbF
P36001
TU7601 TO TUNER PACK (ENG36502G)
RF IN/OUT
MOTOR
P2501
P1531
TO HEAD
VCR VIDEO
P2571
P7502 TO TU7502
TUNER PACK (ENG06802QF)
FM/AM
ANTENNA
P4002
JK3703
COMPONENT
VIDEO OUT
DVD
JK3702
S-VIDEO
LINE OUT
DVD/VCR
VIDEO OUT
LINE IN
EXT
VIDEO IN
JK3701
TO AUDIO/
CONTROL HEAD
P36008
B MAIN P.C.B.
SOLDER SIDE
P5001
TO HEAD CYLINDER
Tuner Pack
P36005
P4001
TO FULL ERASE HEAD
P36002
P36004
P36007
P31001
PbF
D POWER P.C.B.
SOLDER SIDE
T1150
TRANSFORMER
PbF
P1102
SOLDER SIDE
P1101
PbF
J AC INLET P.C.B.
AC IN ~
120V 60Hz

# 25 Parts Location and Replacement Parts List

Notes:

- Important safety notice:

  Components identified by ⚠ mark have special characteristics important for safety.

  Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

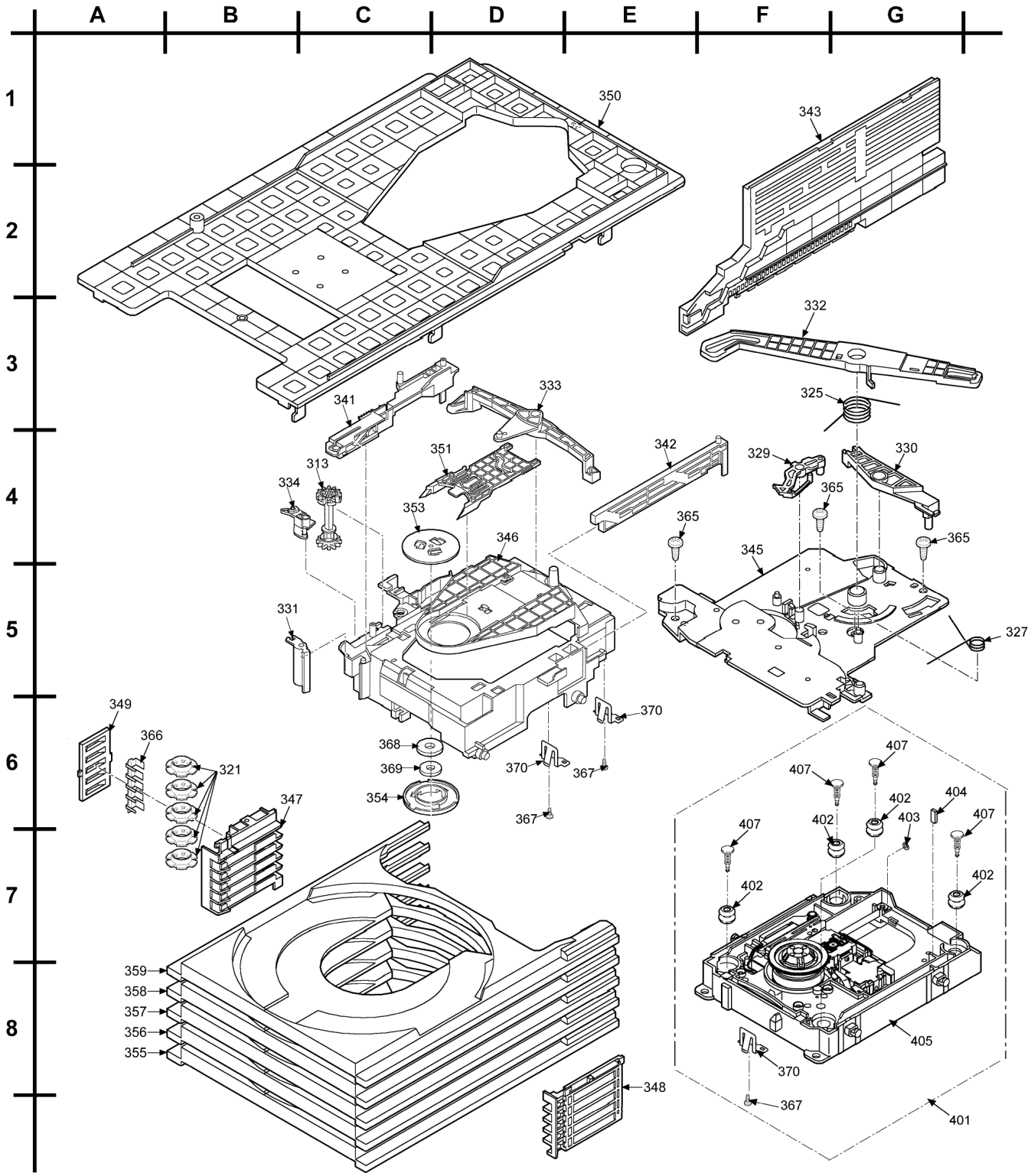
  When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.
- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)

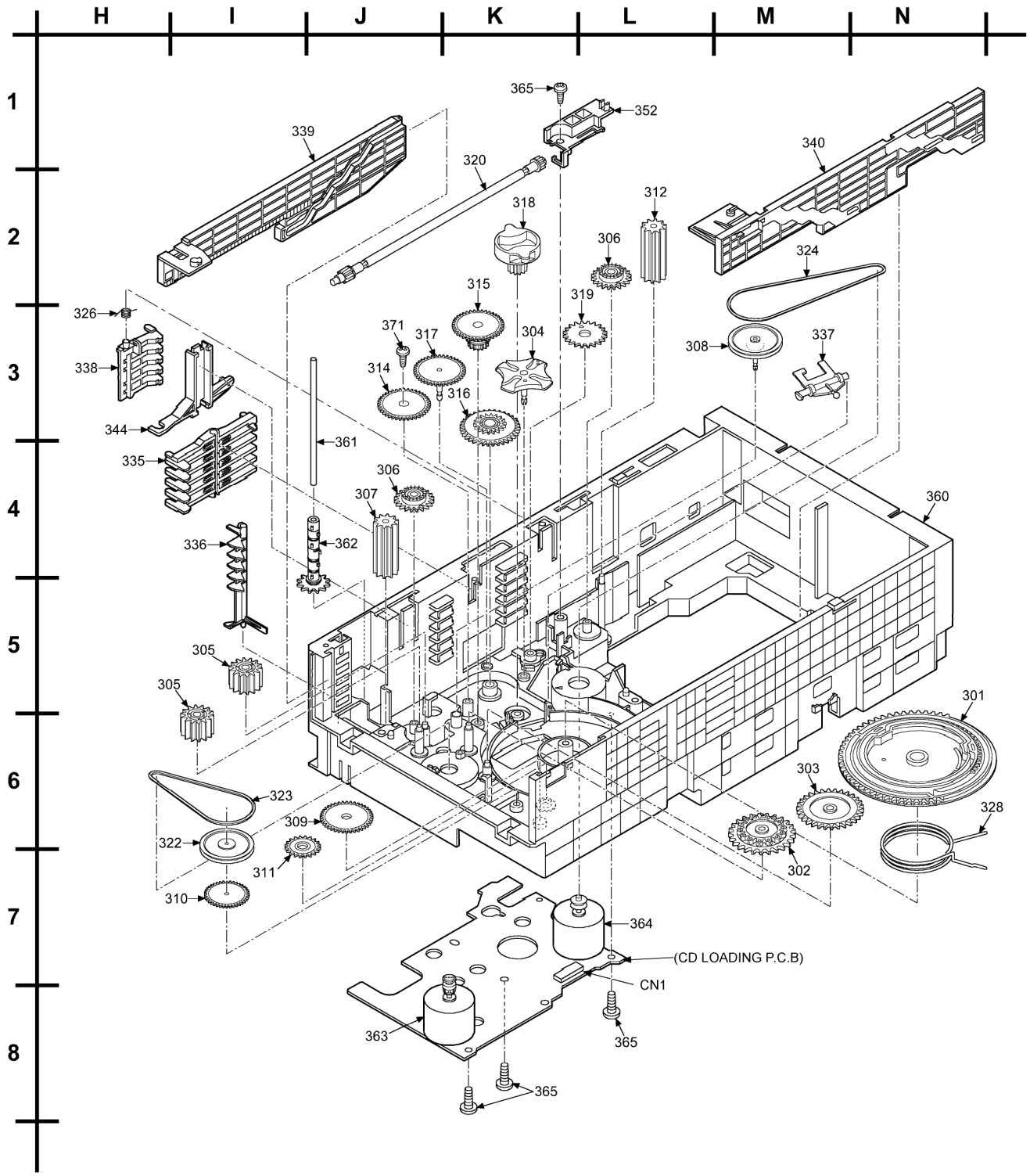
  Parts without these indications can be used for all areas.
- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".
- Capacitor values are in microfarads (μF) unless specified otherwise, P= Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by **PAVCSG.**
- Reference for O/I book languages are as follows:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Ar : | Arabic | Du : | Dutch | It : | Italian | Sp : | Spanish |
| Cf : | Canadian French | En : | English | Ko : | Korean | Sw : | Swedish |
| Cz : | Czech | Fr : | French | Po : | Polish | Co : | Traditional Chinese |
| Da : | Danish | Ge : | German | Ru : | Russian | Cn : | Simplified Chinese |
| Pe : | Persian | | | | | | |

# 25.1. CD Loading Mechanism

## 25.1.1. CD Loading Mechanism Parts Location

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364
(CD LOADING P.C.B)
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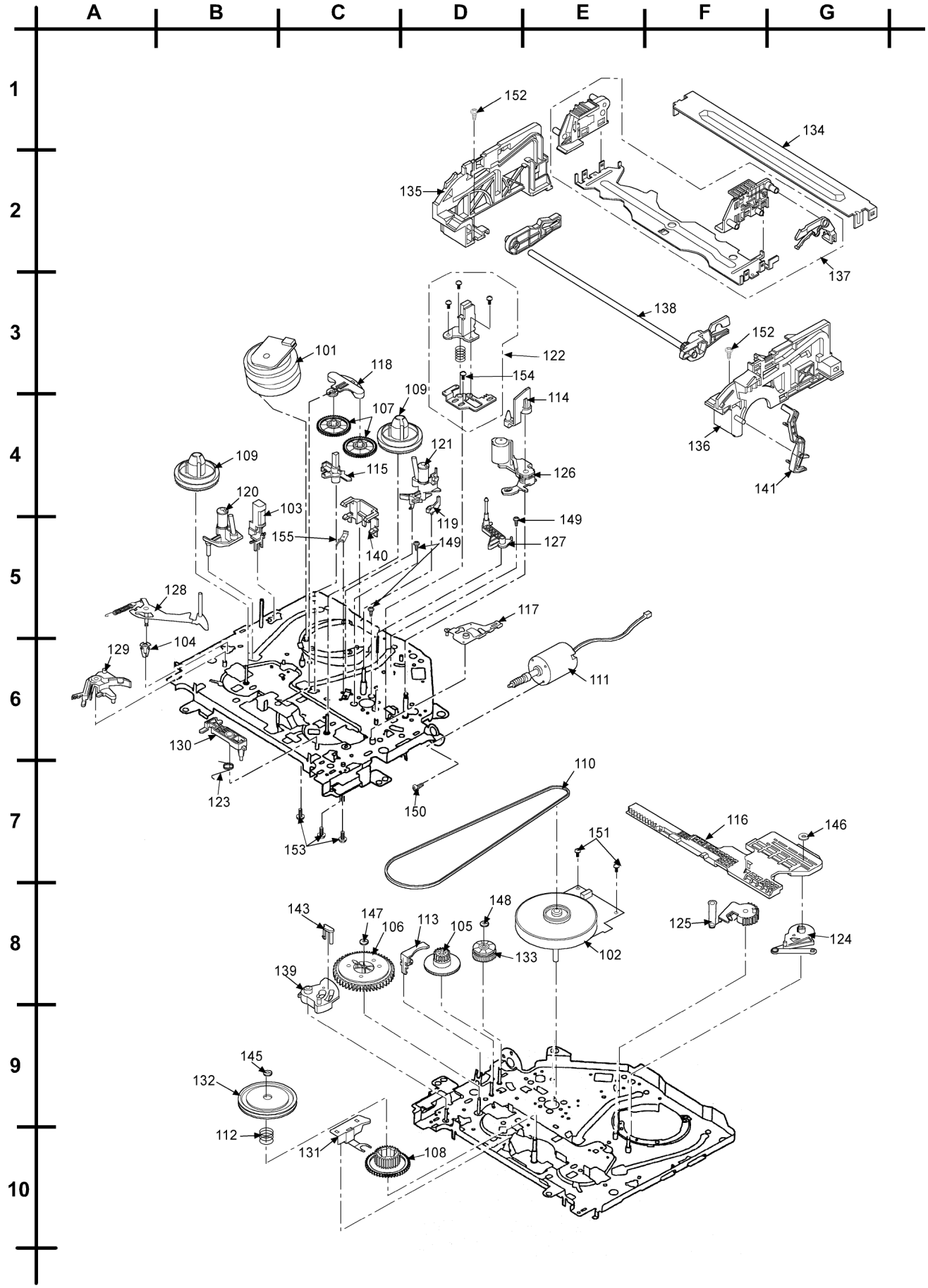
363
365
365

## 25.1.2. CD Loading Mechanism Parts List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | TRAVERSE DECK | |
| | | | |
| 301 | RDG0519 | MAIN GEAR | [M] |
| 302 | RDG0520 | SPEED UP GEAR | [M] |
| 303 | RDG0521 | REVERSE GEAR | [M] |
| 304 | RDG0522 | GENEVA GEAR | [M] |
| 305 | RDG0523 | HOR RELAY GEAR | [M] |
| 306 | RDG0525 | CROWN GEAR | [M] |
| 307 | RDG0526 | TRAY RELAY GEAR | [M] |
| 308 | RDG0527 | UD PULLEY GEAR | [M] |
| 309 | RDG0528 | HOR SPEED DOWN GEAR | [M] |
| 310 | RDG0529 | HOR SPEED DOWN GEAR | [M] |
| 311 | RDG0530 | HOR DRIVE GEAR | [M] |
| 312 | RDG0531 | LOAD RELAY GEAR | [M] |
| 313 | RDG0532 | LOAD GEAR | [M] |
| 314 | RDG0534 | UD SPEED DOWN GEAR | [M] |
| 315 | RDG0535 | UD SPEED DOWN GEAR | [M] |
| 316 | RDG0536 | S/SPEED DOWN GEAR | [M] |
| 317 | RDG0537 | SELECT DRIVE GEAR | [M] |
| 318 | RDG0538 | CHANGE GEAR | [M] |
| 319 | RDG0539 | UD DRIVE GEAR | [M] |
| 320 | RDG0540 | TIMING GEAR | [M] |
| 321 | RDG0542 | TRAY GEAR | [M] |
| 322 | RDG0543 | HOR PULLEY GEAR | [M] |
| 323 | RDV0068 | HOR BELT | [M] |
| 324 | RDV0069 | UD BELT | [M] |
| 325 | RME0344 | UD ASSIST SPRING | [M] |
| 326 | RME0361 | TRAY STOPPER SPRING | [M] |
| 327 | RME0363 | LIMIT SPRING | [M] |
| 328 | RME0368 | MAIN GEAR SPRING | [M] |
| 329 | RML0616 | SPEED UP LOCK | [M] |
| 330 | RML0617 | SEPARATE LEVER 1 | [M] |
| 331 | RML0618 | SEPARATE LEVER 2 | [M] |
| 332 | RML0619-1 | UD. CONNECTION LEVER | [M] |
| 333 | RML0620 | TRV.CONNECT LEVER | [M] |
| 334 | RML0621 | TRAY CHANGE LEVER | [M] |
| 335 | RML0622 | TRAY LOCK LEVER | [M] |
| 336 | RML0623 | OPEN SW. LEVER | [M] |
| 337 | RML0624 | CHG. LEVER | [M] |
| 338 | RML0637 | TRAY STOPPER | [M] |
| 339 | RMM0239 | UD RACK L | [M] |
| 340 | RMM0240 | UD.RACK [R] | [M] |
| 341 | RMM0241 | TRV SLIDE PLATE (L) | [M] |
| 342 | RMM0242 | TRV SLIDE PLATE (R) | [M] |
| 343 | RMM0243 | SELECT RACK PART | [M] |
| 344 | RMM0244 | SELECT GUIDE | [M] |
| 345 | RMQ1051 | PITCH PLATE PART | [M] |
| 346 | RMQ1209 | UD BASE | [M] |
| 347 | RMQ1056 | TRAY GUIDE (L) | [M] |
| 348 | RMQ1057 | TRAY GUIDE (R) | [M] |
| 349 | RMQ1058 | GEAR HOLDER | [M] |
| 350 | RMQ1059 | TOP COVER | [M] |
| 351 | RMQ1060 | CLAMP GUIDE | [M] |
| 352 | RMQ1061 | TG.PLATE | [M] |
| 353 | RMR1531-X | FIXTURE | [M] |
| 354 | RMR1446-X | CLAMPER | [M] |
| 355 | RMR1407A-H1 | TRAY | [M] |
| 356 | RMR1407B-H1 | TRAY | [M] |
| 357 | RMR1407C-H1 | TRAY | [M] |
| 358 | RMR1407D-H1 | TRAY | [M] |
| 359 | RMR1407E-H1 | TRAY | [M] |
| 360 | RFKNAPM77MDS | MECHA BASE | [M] |
| 361 | RMS0762 | TRAY GEAR SHAFT | [M] |
| 362 | RXG0053 | TRAY DRIVE GEAR ASSY | [M] |
| 363 | RXQ0803 | LOADING MOTOR ASS'Y | [M] |
| 364 | RXQ0804 | UD MOTOR ASS'Y | [M] |
| 365 | XTB3+10J | SCREW | [M] |
| 366 | RMC0472 | TRAY SPRING | [M] |
| 367 | XTV2+6G | SCREW | [M] |
| 368 | XWG6FFY | BACKYOKE | [M] |
| 369 | JSM0048 | MAGNET | [M] |
| 370 | RMC0387 | SUPPORT SPRING | [M] |
| 371 | XTBS26+8J | SCREW | [M] |
| 401 | RAE2008W-S | DT68 TRV SUB UNIT | [M] |
| 402 | RMG0598A-K | FLOATING RUBBER | [M] |
| 403 | RMG0617-H | CUSHION RUBBER A | [M] |
| 404 | RMG0618-H | CUSHION RUBBER B | [M] |
| 405 | RMR1596-K | MIDDLE CHASSIS | [M] |
| 407 | RMS0789 | FIXED PIN | [M] |

# 25.2. Cassette Mechanism

## 25.2.1. Cassette Mechanism Parts Location

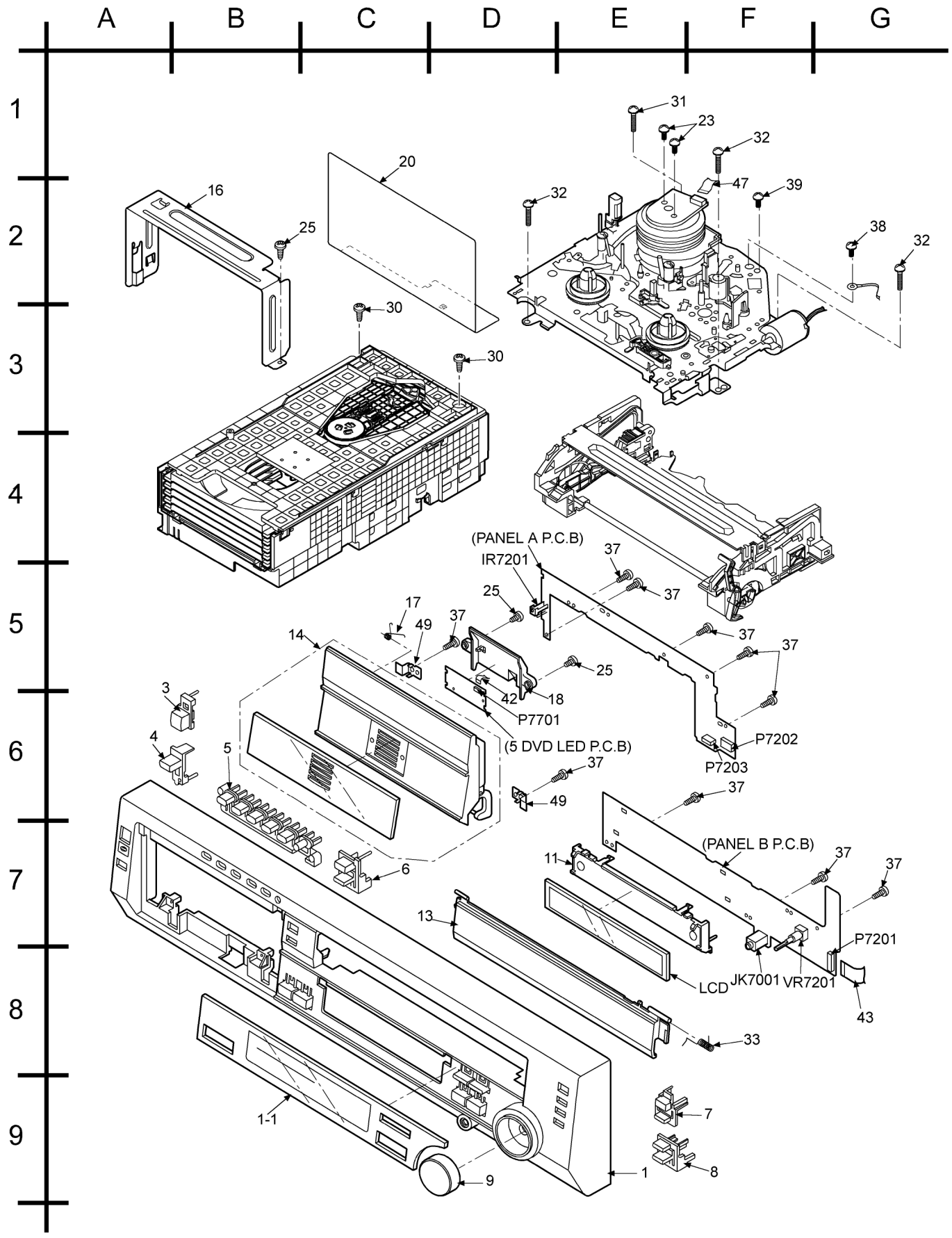


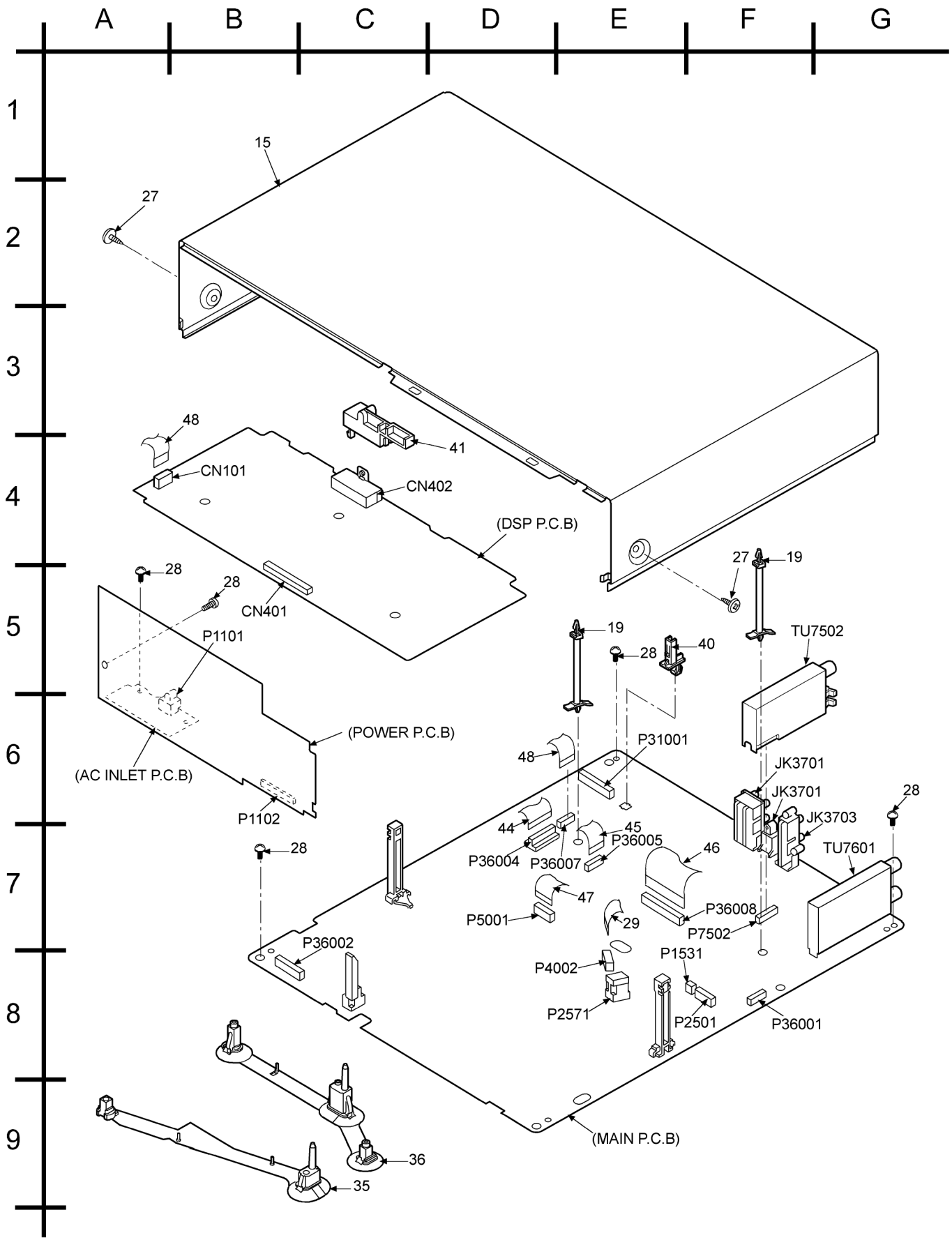
## 25.2.2. Cassette Mechanism Parts List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | CASSETTE DECK | |
| | | | |
| 101 | VEG1641-D | RDD CYLINDER | [M] |
| 102 | VEM0750 | CAPSTAN UNIT | [M] |
| 103 | L1AZ00000004 | FE HEAD UNIT | [M] |
| 104 | VDB1431 | TENSION ARM BOSH | [M] |
| 105 | VDG1510 | INTERMEDIATE GEAR | [M] |
| 106 | VDG1511 | MAIN CAM GEAR | [M] |
| 107 | VDG1512 | IDLER GEAR | [M] |
| 108 | VDG1514 | CHANGE GEAR | [M] |
| 109 | VDR0372 | REEL TABLE | [M] |
| 110 | VDV0391-1 | CAPSTAN BELT | [M] |
| 111 | VEM0797 | LOADING MOTOR UNIT | [M] |
| 112 | VMB3550 | CHANGING GEAR SPRING | [M] |
| 113 | VMD4987 | WORM BEARING 2 | [M] |
| 114 | VMD4252 | OPENER PIECE | [M] |
| 115 | VMD4253 | LED PRISM | [M] |
| 116 | VML3624 | MAIN LEVER | [M] |
| 117 | VML3626 | PINCH CHARGE ARM | [M] |
| 118 | VML3632 | IDLER ARM | [M] |
| 119 | VMX3092 | P4 CAP | [M] |
| 120 | VXA7105 | S SHAFT HOLDER UNIT | [M] |
| 121 | VXA7106 | T SHAFT HOLDER UNIT | [M] |
| 122 | L1AE00000036 | AC HEAD UNIT | [M] |
| 123 | VMB3548 | T BRAKE SPRING | [M] |
| 124 | VXL3107 | S LOADING ARM UNIT | [M] |
| 125 | VXL3108 | T LOADING ARM UNIT | [M] |
| 126 | VXL3109 | PINCH ARM UNIT | [M] |
| 127 | VXL3110 | P5 ARM UNIT | [M] |
| 128 | VXL3111 | TENSION ARM UNIT | [M] |
| 129 | VXL3112 | S BRAKE ARM UNIT | [M] |
| 130 | VXL3113 | T BRAKE ARM UNIT | [M] |
| 131 | VXL3124 | CHANGING LEVER UNIT | [M] |
| 132 | VXP2133 | CENTER CLUTH UNIT | [M] |
| 133 | VXP2168 | TORQUE CLUTCH UNIT | [M] |
| 134 | VMA0L25 | TOP PLATE | [M] |
| 135 | VMD4255 | SIDE PLATE L | [M] |
| 136 | VXA7109 | SIDE PLATE R UNIT | [M] |
| 137 | VXA7110 | CASSETTE HOLDER UNIT | [M] |
| 138 | VXL3160 | MAIN SHAFT UNIT | [M] |
| 139 | VXA7311 | SECTOR GEAR UNIT | [M] |
| 140 | VMD4983 | 9P FPC HOLDER | [M] |
| 141 | VML3706 | OPENER LEVER | [M] |
| 143 | VMD4622 | S DETECT ACTUATOR | [M] |
| 145 | VMX3196 | CUT WASHER(C) | [M] |
| 146 | VMX3196 | CUT WASHER | [M] |
| 147 | VMX2699 | CUT WASHER | [M] |
| 148 | VMX2208 | CUT WASHER | [M] |
| 149 | XTN26+7J | SCREW (CAPSTAN X3) | [M] |
| 150 | XYN3+C4 | MOTOR FIXING SCREW | [M] |
| 151 | XTV26+5F | SCREW | [M] |
| 152 | XTV26+8FR-NC | SCREW | [M] |
| 153 | VHD1117 | DD SCREW | [M] |
| 154 | VHD1044 | A/C SET SCREW | [M] |
| 155 | VMC1247-1 | EARTH SPRING | [M] |

# 25.3. Cabinet

## 25.3.1. Cabinet Parts Location

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CN402
(DSP P.C.B)
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CN401
P1101
(POWER P.C.B)
(AC INLET P.C.B)
P1102
27
19
19
28
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TU7502
48
P31001
JK3701
JK3701
JK3703
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P36005
P36004
P36007
46
TU7601
28
47
P5001
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P36008
P7502
P36002
P4002
P1531
P2571
P2501
P36001
(MAIN P.C.B)
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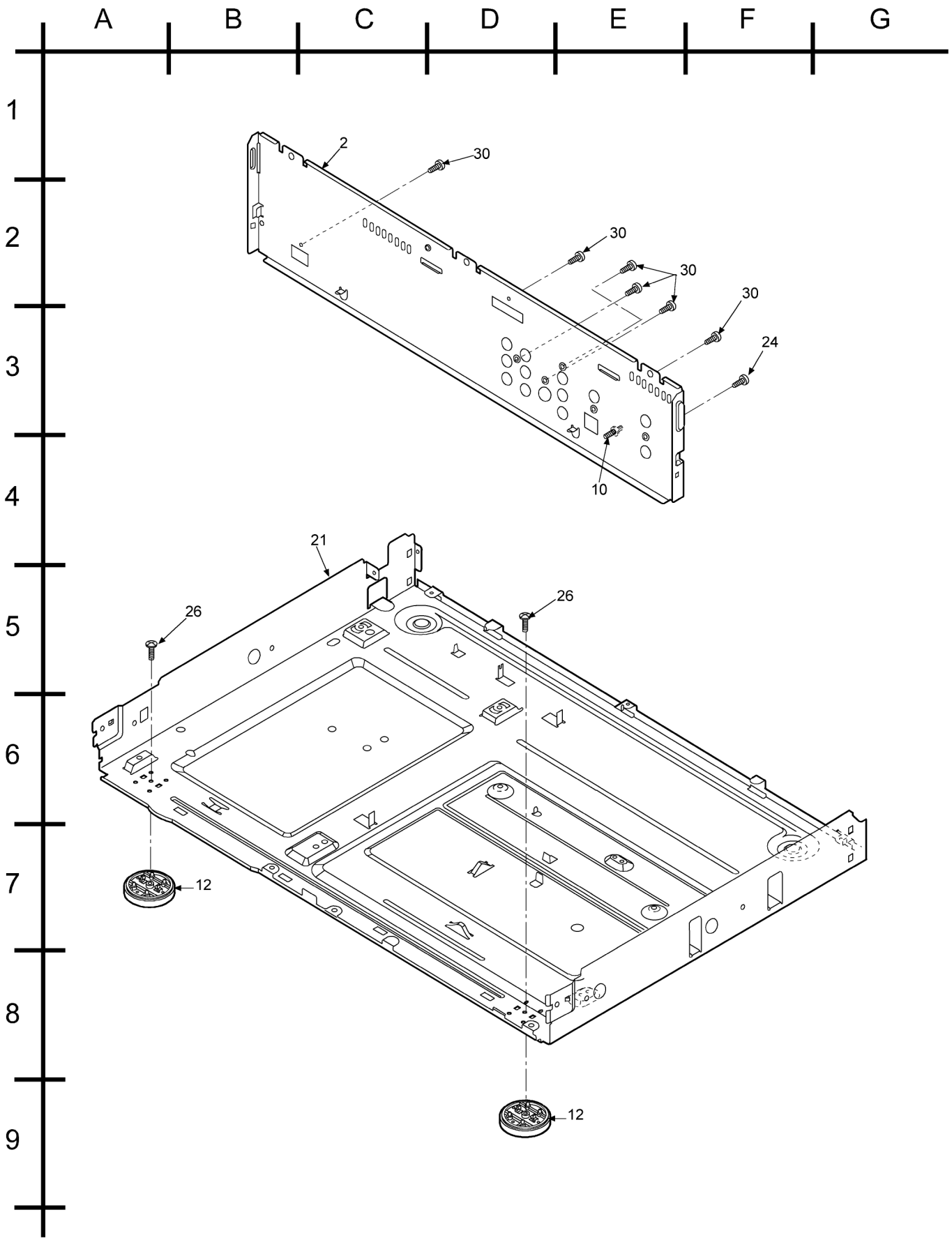
35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## 25.3.2. Cabinet Parts List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | CABINET AND CHASSIS | |
| | | | |
| 1 | RFKGAHT820PS | FRONT PANEL ASS'Y | [M] |
| 1-1 | RGKV0029 | FRONT ORNAMENT | [M] |
| 2 | RGRV0004 | REAR PANEL | [M] P |
| 2 | RGRV0005 | REAR PANEL | [M] PC |
| 3 | RGUV0032 | POWER BUTTON | [M] |
| 4 | RGUV0033 | SELECTOR BUTTON | [M] |
| 5 | RGUV0034 | TOP BUTTON | [M] |
| 6 | RGUV0035 | DISK CHECK BUTTON | [M] |
| 7 | RGUV0036 | VHS 1 BUTTON | [M] |
| 8 | RGUV0065 | VHS 2 BUTTON | [M] |
| 9 | RGWV0002 | VOLUME KNOB | [M] |
| 10 | RHD30070 | EARTH TERMINAL | [M] |
| 11 | RJFV0001 | FIP HOLDER | [M] |
| 12 | RKAV0001-S | SET LEG UNIT | [M] |
| 13 | RKFV0003 | BLINDER PANEL | [M] |
| 14 | RKFV0015 | DVD DOOR UNIT | [M] |
| 15 | RKMV0008 | TOP PANEL | [M] |
| 16 | RMAV0003 | DVD BRACKET | [M] |
| 17 | RMEV0002 | DVD DOOR SPRING | [M] |
| 18 | RMNV0012 | LED COVER | [M] |
| 19 | RMNV0013 | PCB STAND | [M] |
| 20 | RMZV0004 | POWER BARRIER | [M] |
| 21 | RXQV0005 | CHASSIS FRAME UNIT | [M] |
| 23 | VHD1095 | CYLINDER SCREW B | [M] |
| 24 | XSB3+5FC | SCREW RF | [M] |
| 25 | XTB3+6G | SCREW | [M] |
| 26 | XTB3+6J | SCREW | [M] |
| 27 | XTW3+6TFC | SCREW (TOP PANEL) | [M] |
| 28 | XTW3+6TR | SCREW MAIN | [M] |
| 29 | VWJ1652 | AC HEAD FFC WIRE | [M] |
| 30 | VHD0690 | SCREW (REAR P) | [M] |
| 31 | VHD1452-1 | SCREW (L) | [M] |
| 32 | VHD1453-1 | SCREW (S) | [M] |
| 33 | VMB2521 | BLINDER SPRING | [M] |
| 35 | VMX3115 | MECHA SPACER (F) | [M] |
| 36 | VMX3229 | MECHA SPACER (R) | [M] |
| 37 | XTBS26+10J | SCREW | [M] |
| 38 | XTV26+5FR | SCREW | [M] |
| 39 | XTW3+10PR | SCREW (MECHA) | [M] |
| 40 | RMN0203 | PCB SUPPORT | [M] |
| 41 | RMN0735 | CONNECTOR HOLDER | [M] |
| 42 | RWJV0002 | 8P LED-FRONT | [M] |
| 43 | RWJV0003 | 19P MAIN-FRONT | [M] |
| 44 | RWJV0004 | 50P FFC BE-MAIN | [M] |
| 45 | RWJV0005 | 14P FFC TRAVERSE | [M] |
| 46 | RWJV0006 | 30P FFC DSP-MAIN | [M] |
| 47 | VWJ070W200MM | RDD FFC WIRE | [M] |
| 48 | VWJ12XW115MM | 12P FFC DSP-MAIN | [M] |
| 49 | RMA1543 | CD LID SUPPORT | [M] |

# 25.4. Electrical Parts List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | P.C.B. | [M] |
| | | | |
| | REPV0021A | DVD MODULE P.C.B. | [M] (RTL) |
| | VEP02578A | VCR DECK P.C.B. | [M] (RTL) |
| | VEPV0001A | MAIN P.C.B. | [M] (RTL) |
| | VEPV0002A | DSP P.C.B. | [M] (RTL) |
| | VEPV0003A | AC INLET P.C.B. | [M] (RTL) |
| | VEPV0004A | POWER P.C.B. | [M] (RTL) |
| | VEPV0005A | PANEL A P.C.B. | [M] (RTL) |
| | VEPV0006A | PANEL B P.C.B. | [M] (RTL) |
| | VEPV0007A | 5 DVD LED P.C.B. | [M] (RTL) |
| | REP3569A | CD LOADING P.C.B. | [M] (RTL) |
| | | | |
| | | INTEGRATED CIRCUITS | |
| | | | |
| IC11 | C0GAG0000007 | IC UP/DOWN MOTOR DRIVE | [M] |
| IC21 | C0GAG0000007 | IC LOADING MOTOR DRIVE | [M] |
| IC201 | C1AB00001472 | IC CAPSTAN DRIVE | [M] |
| IC201 | C2HBZC000013 | IC DSP | [M] |
| IC202 | KIA4558FEL | IC DUAL OP AMP | [M] |
| IC301 | C0JBAR000326 | IC LOGIC | [M] |
| IC302 | C0ABCB000040 | IC QUAD OP AMP | [M] |
| IC303 | C1BB00000782 | IC 4CH VOLUME | [M] |
| IC401 | KIA4558FEL | IC OP AMP | [M] |
| IC402 | M62456FPE1 | IC SUPER BASS | [M] |
| IC403 | C0ABCB000040 | IC QUAD OP AMP | [M] |
| IC501 | KIA4558FEL | IC DUAL OP AMP | [M] |
| IC701 | KIA4558FEL | IC DUAL OP AMP | [M] |
| IC1200 | C0DAEJC00003 | IC SHUNT REGULATOR | [M] |
| IC1511 | B3NAA0000049 | IC REEL SENSOR | [M] |
| IC1512 | B3NAA0000049 | IC REEL SENSOR | [M] |
| IC2501 | C1AB00001479 | IC CYL DRIVE | [M] |
| IC2502 | C0DBZJG00005 | IC REGULATOR | [M] |
| IC2601 | C0JBAS000008 | IC ANALOG SWITCH | [M] |
| IC3001 | C1AB00001838 | IC AV 1 | [M] |
| IC3703 | C1AB00001192 | IC SWITCHING | [M] |
| IC4501 | AN3663FBP-AV | IC HI-FI | [M] |
| IC6001 | C2CBHF000342 | IC MICON | [M] |
| IC6201 | C0EBH0000172 | IC RESET | [M] |
| IC6301 | C0DBCHD00002 | IC REGULATOR | [M] |
| IC7201 | C0HBB0000039 | IC FL DRIVER | [M] |
| IC8001 | MN2DS0003APH | IC DV2.1 | [M] |
| IC8051 | C3ABPG000067 | IC 64 SDRAM | [M] |
| IC8111 | C0CBCBD00018 | IC 3.3 REG | [M] |
| IC8251 | C0GBG0000044 | IC DRIVER | [M] |
| IC8271 | C0GBF0000004 | IC MOTOR | [M] |
| IC8451 | C0FBBK000036 | IC AUDIO DAC | [M] |
| IC8601 | C0EBE0000384 | IC RESET | [M] |
| IC8605 | C0EBA0000031 | IC RESET | [M] |
| IC8651 | RFKFMH81T160 | IC 16M FLASH ROM | [SPC] |
| IC8691 | C0JBCA000066 | IC LOGIC | [M] |
| IC8695 | C0JBCA000066 | IC LOGIC | [M] |
| IC33001 | C0DBZHG00013 | IC RESET | [M] |
| IC33002 | C0DBEKG00003 | IC REGULATOR | [M] |
| IC33501 | C9ZB00000431 | IC MICROCONTROLLER | [M] |
| IC36001 | C2CBJG000414 | IC MICON | [M] |
| IC36003 | C0EBH0000172 | IC RESET | [M] |
| | | | |
| | | TRANSISTORS | |
| | | | |
| Q1 | B3NAA0000068 | TRANSISTOR | [M] |
| Q401 | B1GFGCAA0001 | TRANSISTOR | [M] |
| Q402 | B1GFGCAA0001 | TRANSISTOR | [M] |
| Q403 | B1GFGCAA0001 | TRANSISTOR | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| Q404 | B1GFGCAA0001 | TRANSISTOR | [M] |
| Q405 | KTD1304TA | TRANSISTOR | [M] |
| Q406 | KRA110STA | TRANSISTOR | [M] |
| Q407 | KRA110STA | TRANSISTOR | [M] |
| Q408 | KRA110STA | TRANSISTOR | [M] |
| Q409 | KRA110STA | TRANSISTOR | [M] |
| Q410 | KRA110STA | TRANSISTOR | [M] |
| Q411 | KRA110STA | TRANSISTOR | [M] |
| Q412 | KTC3875GRTA | TRANSISTOR | [M] |
| Q601 | 2SB14170QA | TRANSISTOR | [M] |
| Q602 | B1ABCF000011 | TRANSISTOR | [M] |
| Q603 | 2SB621ARSTA | TRANSISTOR | [M] |
| Q604 | B1ABCF000011 | TRANSISTOR | [M] |
| Q605 | B1GDCFJJ0002 | TRANSISTOR | [M] |
| Q606 | B1GBCFJN0004 | TRANSISTOR | [M] |
| Q607 | KTC3875GRTA | TRANSISTOR | [M] |
| Q608 | KTC3875GRTA | TRANSISTOR | [M] |
| Q609 | KTA1046 | TRANSISTOR | [M] |
| Q610 | KTC2026 | TRANSISTOR | [M] |
| Q611 | B1ADCF000001 | TRANSISTOR | [M] |
| Q1150 | B1DEDQ000014 | TRANSISTOR | [M] |
| Q1151 | 2SC3311ASA | TRANSISTOR | [M] |
| Q1152 | 2SC3311ASA | TRANSISTOR | [M] |
| Q1153 | B1DEDQ000014 | TRANSISTOR | [M] |
| Q1200 | B3PBA0000078 | TRANSISTOR | [M] |
| Q1351 | B1AAGD000006 | TRANSISTOR | [M] |
| Q1352 | B1AAGD000006 | TRANSISTOR | [M] |
| Q1354 | B1AAGD000006 | TRANSISTOR | [M] |
| Q1501 | PNA2604M01VT | TRANSISTOR | [M] |
| Q1502 | PNA2604M01VT | TRANSISTOR | [M] |
| Q3001 | 2SD0601A0L | TRANSISTOR | [M] |
| Q3003 | 2SD0601A0L | TRANSISTOR | [M] |
| Q3701 | 2SB1218A0L | TRANSISTOR | [M] |
| Q4081 | B1AAGD000006 | TRANSISTOR | [M] |
| Q4082 | 2SD114900L | TRANSISTOR | [M] |
| Q4083 | 2SD0601A0L | TRANSISTOR | [M] |
| Q4084 | 2SB0710A0L | TRANSISTOR | [M] |
| Q6305 | 2SD0601A0L | TRANSISTOR | [M] |
| Q6306 | 2SD0601A0L | TRANSISTOR | [M] |
| Q7001 | 2SD0602A0L | TRANSISTOR | [M] |
| Q7501 | KTC2026 | TRANSISTOR | [M] |
| Q7701 | UNR221500L | TRANSISTOR | [M] |
| Q7702 | UNR211700L | TRANSISTOR | [M] |
| Q7703 | UNR221500L | TRANSISTOR | [M] |
| Q7704 | UNR211700L | TRANSISTOR | [M] |
| Q7705 | UNR221500L | TRANSISTOR | [M] |
| Q7706 | UNR211700L | TRANSISTOR | [M] |
| Q7707 | UNR221500L | TRANSISTOR | [M] |
| Q7708 | UNR211700L | TRANSISTOR | [M] |
| Q7709 | UNR221500L | TRANSISTOR | [M] |
| Q7710 | UNR211700L | TRANSISTOR | [M] |
| Q8550 | 2SB1219AHL | TRANSISTOR | [M] |
| Q8551 | 2SD1819A0L | TRANSISTOR | [M] |
| Q8552 | 2SB09700RL | TRANSISTOR | [M] |
| Q8560 | 2SD1819A0L | TRANSISTOR | [M] |
| Q8561 | 2SD1819A0L | TRANSISTOR | [M] |
| Q8562 | 2SB09700RL | TRANSISTOR | [M] |
| Q8605 | 2SD1819A0L | TRANSISTOR | [M] |
| Q8606 | 2SD1819A0L | TRANSISTOR | [M] |
| Q33001 | B1AAGD000006 | TRANSISTOR | [M] |
| Q33003 | 2SC3940A0A | TRANSISTOR | [M] |
| Q33004 | B1AAGD000006 | TRANSISTOR | [M] |
| Q33006 | 2SD0601A0L | TRANSISTOR | [M] |
| Q33007 | 2SD0602A0L | TRANSISTOR | [M] |
| Q33008 | 2SD0601A0L | TRANSISTOR | [M] |
| Q33009 | KRC103STA | TRANSISTOR | [M] |
| Q33010 | 2SC3940AHA | TRANSISTOR | [M] |
| Q34003 | 2SD0601A0L | TRANSISTOR | [M] |
| Q34004 | 2SB0709A0L | TRANSISTOR | [M] |
| | | | |
| QR3700 | UNR521200L | TRANSISTOR | [M] |
| QR4081 | UNR211100L | TRANSISTOR | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| QR4082 | UNR221300L | TRANSISTOR | [M] |
| QR4504 | UNR511300L | TRANSISTOR | [M] |
| QR4505 | UNR521600L | TRANSISTOR | [M] |
| QR4506 | UNR521600L | TRANSISTOR | [M] |
| QR4701 | UNR521600L | TRANSISTOR | [M] |
| QR4702 | UNR521600L | TRANSISTOR | [M] |
| QR4703 | UNR511300L | TRANSISTOR | [M] |
| QR7201 | UNR211200L | TRANSISTOR | [M] |
| QR7202 | UNR221300L | TRANSISTOR | [M] |
| QR8420 | UNR521100L | TRANSISTOR | [M] |
| QR8571 | UNR511V00L | TRANSISTOR | [M] |
| QR33002 | UNR211200L | TRANSISTOR | [M] |
| QR33003 | UNR211200L | TRANSISTOR | [M] |
| QR33005 | UNR211200L | TRANSISTOR | [M] |
| QR33012 | UNR221300L | TRANSISTOR | [M] |
| QR33013 | UNR221300L | TRANSISTOR | [M] |
| | | | |
| | | DIODES | |
| | | | |
| D201 | B0JCME000012 | DIODE | [M] |
| D202 | B0JCME000012 | DIODE | [M] |
| D203 | B0JCME000012 | DIODE | [M] |
| D301 | B0BC5R000009 | DIODE | [M] |
| D302 | B0BC5R000009 | DIODE | [M] |
| D401 | B0ACCK000005 | DIODE | [M] |
| D402 | B0ACCK000005 | DIODE | [M] |
| D403 | B0ACCK000005 | DIODE | [M] |
| D404 | B0ACCK000005 | DIODE | [M] |
| D601 | B0ADCC000002 | DIODE | [M] |
| D602 | B0ADCC000002 | DIODE | [M] |
| D603 | B0EAKM000117 | DIODE | [M] |
| D604 | B0BC5R000009 | DIODE | [M] |
| D605 | B0EAKM000117 | DIODE | [M] |
| D606 | B0ACCK000005 | DIODE | [M] |
| D607 | B0ADCJ000020 | DIODE | [M] |
| D608 | B0EAKM000117 | DIODE | [M] |
| D609 | B0EAKM000117 | DIODE | [M] |
| D610 | B0EAKM000117 | DIODE | [M] |
| D611 | B0EAKM000117 | DIODE | [M] |
| D612 | RL1N4003S-P | DIODE | [M] |
| D613 | RL1N4003S-P | DIODE | [M] |
| D614 | B0EAKM000117 | DIODE | [M] |
| D615 | UDZSTE178R2B | DIODE | [M] |
| D1110 | D4EA7471A003 | DIODE | [M] |
| D1140 | B0KB00000013 | DIODE | [M] |
| D1152 | MA2C18500E | DIODE | [M] |
| D1155 | MA2C165001VT | DIODE | [M] |
| D1157 | MAZ40360MF | DIODE | [M] |
| D1180 | MAZ751000C | DIODE | [M] |
| D1210 | B0HAGM000006 | DIODE | [M] |
| D1230 | MA2C18500E | DIODE | [M] |
| D1240 | B0JAME000037 | DIODE | [M] |
| D1241 | B0JAME000037 | DIODE | [M] |
| D1250 | B0JAMK000015 | DIODE | [M] |
| D1251 | B0JAMK000015 | DIODE | [M] |
| D1260 | B0JAPE000008 | DIODE | [M] |
| D1261 | B0JAPE000008 | DIODE | [M] |
| D1270 | MA2C18500E | DIODE | [M] |
| D1280 | B0JAME000037 | DIODE | [M] |
| D1290 | B0JAMK000015 | DIODE | [M] |
| D1291 | B0JAMK000015 | DIODE | [M] |
| D1351 | MAZ4056NHF | DIODE | [M] |
| D1501 | B3EA00000072 | DIODE | [M] |
| D2001 | B0AAED000003 | DIODE | [M] |
| D2002 | B0AAED000003 | DIODE | [M] |
| D4501 | MA2C165001VT | DIODE | [M] |
| D6302 | B0JACE000001 | DIODE | [M] |
| D6305 | MAZ4062NLF | DIODE | [M] |
| D6306 | MAZ4056NHF | DIODE | [M] |
| D7201 | MAZ4240NMF | DIODE | [M] |
| D7202 | B0AAED000003 | DIODE | [M] |
| D7501 | B0BA9R000007 | DIODE | [M] |
| D7601 | MAZ4300NMF | DIODE | [M] |
| D7701 | B3AKB0000016 | DIODE | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| D7702 | B3AKB0000016 | DIODE | [M] |
| D7703 | B3AKB0000016 | DIODE | [M] |
| D7704 | B3AKB0000016 | DIODE | [M] |
| D7705 | B3AKB0000016 | DIODE | [M] |
| D7751 | B0JACE000001 | DIODE | [M] |
| D7752 | MA2C700A0F | DIODE | [M] |
| D7753 | B0AAED000003 | DIODE | [M] |
| D7754 | B0JACE000001 | DIODE | [M] |
| D8550 | MA2S11100L | DIODE | [M] |
| D8571 | MA2J72800L | DIODE | [M] |
| D33001 | MAZ4056NHF | DIODE | [M] |
| D33002 | B0JAME000025 | DIODE | [M] |
| D33003 | MAZ4130NLF | DIODE | [M] |
| D33004 | MAZ4062NLF | DIODE | [M] |
| D33005 | B0EAKL000031 | DIODE | [M] |
| D33006 | B0EAKL000031 | DIODE | [M] |
| D33007 | B0EAKL000031 | DIODE | [M] |
| D33008 | MAZ4062NLF | DIODE | [M] |
| D33009 | B0BA7R900004 | DIODE | [M] |
| D34001 | MAZ4075NHF | DIODE | [M] |
| D34011 | B0AAED000003 | DIODE | [M] |
| D36001 | MAZ4075NHF | DIODE | [M] |
| D36002 | B0JACE000001 | DIODE | [M] |
| D36003 | B0JACE000001 | DIODE | [M] |
| D36004 | B0JACE000001 | DIODE | [M] |
| D36005 | B0JACE000001 | DIODE | [M] |
| D36006 | B0JACE000001 | DIODE | [M] |
| D36010 | B0JACE000001 | DIODE | [M] |
| D36012 | B0JACE000001 | DIODE | [M] |
| | | | |
| | | VARIABLE RESISTORS | |
| | | | |
| VR7201 | EVEKE2F3024B | VR VOLUME JOG | [M] |
| | | | |
| | | SWITCHES | |
| | | | |
| S1 | K0L1BA000065 | SW STOCK | [M] |
| S2 | K0L1BA000065 | SW PLAY | [M] |
| S3 | K0L1BA000078 | SW BOTTOM | [M] |
| S4 | RSH1A045-1A | SW OPEN | [M] |
| S5 | K0L1BA000065 | SW CHANGE | [M] |
| S1531 | K0C111A00006 | SW SAFETY TAB | [M] |
| S1532 | K0ZZ00000598 | SW MODE | [M] |
| S7001 | EVQ21405RJ | SW DISC 5 | [M] |
| S7002 | EVQ21405RJ | SW DISC CHANGE | [M] |
| S7003 | EVQ21405RJ | SW DISC 4 | [M] |
| S7005 | EVQ21405RJ | SW DISC 3 | [M] |
| S7006 | EVQ21405RJ | SW D. PLAY | [M] |
| S7007 | EVQ21405RJ | SW DISC 2 | [M] |
| S7008 | EVQ21405RJ | SW STOP | [M] |
| S7009 | EVQ21405RJ | SW DISC 1 | [M] |
| S7010 | EVQ21405RJ | SW DISC CHECK | [M] |
| S7011 | EVQ21405RJ | SW SELECTOR | [M] |
| S7012 | EVQ21405RJ | SW OPEN/CLOSE | [M] |
| S7013 | EVQ21405RJ | SW POWER | [M] |
| S7016 | EVQ21405RJ | SW PLAY | [M] |
| S7017 | EVQ21405RJ | SW FF | [M] |
| S7018 | EVQ21405RJ | SW STOP | [M] |
| S7019 | EVQ21405RJ | SW REW | [M] |
| S7020 | EVQ21405RJ | SW CHANNEL UP | [M] |
| S7021 | EVQ21405RJ | SW CHANNEL DOWN | [M] |
| S7023 | EVQ21405RJ | SW REC | [M] |
| S7024 | EVQ21405RJ | SW EJECT | [M] |
| | | | |
| | | COILS & TRANSFORMERS | |
| | | | |
| L601 | G0C100JA0030 | INDUCTOR | [M] |
| L602 | G0A200D00002 | RF CHOKE COIL | [M] |
| L603 | G0A200D00002 | RF CHOKE COIL | [M] |
| L608 | J0JCC0000124 | CHIP COIL | [M] |
| L1120 | G0B233D00002 | LINE FILTER | [M] ⚠ |
| L1121 | G0B233D00002 | LINE FILTER | [M] ⚠ |
| L1240 | G0A220G00018 | COIL | [M] |
| L1250 | G0A220G00018 | COIL | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| L1260 | G0A150G00003 | COIL | [M] |
| L1290 | G0A220G00018 | COIL | [M] |
| L3001 | G1C271JA0036 | CHIP COIL | [M] |
| L3005 | G0C120JA0019 | COIL | [M] |
| L3301 | G0C270JA0019 | COIL | [M] |
| L3302 | G0C680JA0019 | COIL | [M] |
| L3303 | G0C270JA0019 | COIL | [M] |
| L3705 | G0C680JA0019 | COIL | [M] |
| L4081 | G0C471KA0004 | COIL | [M] |
| L4501 | G0C1R2J00004 | COIL | [M] |
| L4502 | G0C391JA0019 | COIL | [M] |
| L5001 | G0C680JA0019 | COIL | [M] |
| L6001 | G0C5R6JA0019 | COIL | [M] |
| L7001 | J0JBC0000019 | CHIP INDUCTOR | [M] |
| L7003 | J0JBC0000019 | CHIP INDUCTOR | [M] |
| L7004 | J0JBC0000019 | CHIP INDUCTOR | [M] |
| L7005 | J0JBC0000019 | CHIP INDUCTOR | [M] |
| L7006 | J0JBC0000019 | CHIP INDUCTOR | [M] |
| L7200 | G0C3R3JA0027 | COIL | [M] |
| L7601 | G0C100JA0030 | INDUCTOR | [M] |
| L8201 | G1C100K00020 | CHIP INDUCTOR | [M] |
| L8202 | J0JCC0000079 | CHIP INDUCTOR | [M] |
| L8301 | G1C100KA0055 | CHIP INDUCTOR | [M] |
| L8302 | J0JCC0000079 | CHIP INDUCTOR | [M] |
| L8420 | G1C220KA0055 | CHIP INDUCTOR | [M] |
| L8550 | G1C100KA0055 | CHIP INDUCTOR | [M] |
| L33501 | G0C220JA0019 | COIL | [M] |
| L34001 | G0C101JA0019 | RF CHOKE COIL | [M] |
| L36001 | G0C3R3JA0027 | COIL | [M] |
| | | | |
| T1150 | G4D2A0000159 | SW TRANSFORMER | [M] ⚠ |
| T4081 | EQQ7QF027Q | IF TRANSFORMER | [M] ⚠ |
| | | | |
| | | MISC | |
| | | | |
| B7751 | VSB0205 | BATTERY | [M] |
| | | | |
| DP7201 | A2BD00000083 | FL DISPLAY | [M] |
| | | | |
| IR7201 | B3RAB0000025 | REMOTE SENSOR | [M] |
| | | | |
| LR1150 | J1ZZA0000004 | RESONAN SNUBBER | [M] |
| | | | |
| TU7502 | ENG06802QF | TUNER PACK | [M] |
| TU7601 | ENG36502G | TUNER | [M] |
| | | | |
| | | OSCILLATORS | |
| | | | |
| X201 | RSXZ36M8M01T | CRYSTAL OSCILLATOR | [M] |
| X3001 | H0D357400067 | CRYSTAL OSCILLATOR | [M] |
| X6001 | H0D120500009 | CRYSTAL OSCILLATOR | [M] |
| X6002 | H0A327200064 | CRYSTAL OSCILLATOR | [M] |
| X8621 | H0J270500064 | CRYSTAL OSCILLATOR | [M] |
| X36001 | H2B100500004 | CERAMIC RESONATOR | [M] |
| | | | |
| | | DISPLAY TUBES | |
| | | | |
| FL4561 | EFCT4R5MS5W | CERAMIC FILTER | [M] |
| FL8101 | F1H0J1050022 | 1 6.3V | [M] |
| FL8102 | F1H0J1050022 | 1 6.3V | [M] |
| FL8103 | F1H0J1050022 | 1 6.3V | [M] |
| FL8104 | F1J1E1040022 | 0.1 25V | [M] |
| | | | |
| | | FUSE | |
| | | | |
| F1101 | K5D162AQ0004 | 1.6A FUSE | [M] ⚠ |
| | | | |
| | | FUSE HOLDERS | |
| | | | |
| ZA1103 | EYF52BC | FUSE HOLDER | [M] |
| ZA1104 | EYF52BC | FUSE HOLDER | [M] |
| | | | |
| | | FUSE PROTECTORS | |
| | | | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| FP601 | K5G402AA0002 | FUSE PROTECTOR | [M] ⚠ |
| FP602 | K5G102AA0002 | FUSE PROTECTOR | [M] ⚠ |
| | | | |
| IP1240 | K5G252AA0003 | FUSE PROTECTOR | [M] ⚠ |
| | | | |
| | | JACKS | |
| | | | |
| JK3701 | K2HA612B0039 | JK 2P RCA PIN | [M] |
| JK3702 | K1CB105B0037 | JK VIDEO | [M] |
| JK3703 | K2HA103B0022 | JK I/O | [M] |
| JK7001 | RJJ37TK07-X | JK HEADPHONE | [M] |
| | | | |
| P1101 | K2AB2B000002 | AC INLET | [M] ⚠ |
| | | | |
| | | CHIP RESISTORS | |
| | | | |
| W105 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W106 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W108 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W201 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W301 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W302 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W401 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W402 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W403 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W501 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W502 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W503 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W504 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W505 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W506 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W506 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W507 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W508 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W508 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W509 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W509 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W510 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W511 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W512 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W513 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W514 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W515 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W516 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W517 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W518 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W519 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W520 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W523 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W524 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W525 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W526 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W527 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W528 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W529 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W530 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W531 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W532 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W535 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W536 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W537 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W538 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W540 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W541 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W542 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W543 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W544 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W545 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W547 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W548 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W549 | ERJ3GEY0R00V | 0 1/16W | [M] |
| W551 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W7701 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W7702 | ERJ6GEY0R00V | 0 1/10W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| W7703 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W7704 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W7705 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W7706 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W7707 | ERJ6GEY0R00V | 0 1/10W | [M] |
| W7708 | ERJ6GEY0R00V | 0 1/10W | [M] |
| | | | |
| P1531 | K1KA02A00375 | LOADING MOTOR WIRE | [M] |
| | | | |
| | | CONNECTORS | |
| | | | |
| CN1 | K1MN14B00066 | 14P FFC CONNECTOR | [M] |
| CN101 | K1MN12A00049 | 12P FFC CONNECTOR | [M] |
| CN401 | RJS2A4230-F | 30P FFC CONNECTOR | [M] |
| CN402 | K1FB125B0095 | SYSTEM CONNECTOR | [M] |
| | | | |
| P201 | K1KB08A00078 | 8P CONNECTOR | [M] |
| P1102 | K1KB14B00026 | 14P CONNECTOR | [M] |
| P2501 | K1MN07A00020 | 7P CONNECTOR | [M] |
| P2571 | K1KA08A00290 | 8P CONNECTOR | [M] |
| P4001 | K1MZ02A00003 | 2P CONNECTOR | [M] |
| P4002 | RJS1A9406 | CONNECTOR | [M] |
| P5001 | K1MN09A00029 | 9P CONNECTOR | [M] |
| P7201 | K1MN19B00072 | 19P FFC CONNECTOR | [M] |
| P7202 | K1KB12B00039 | 12P CONNECTOR | [M] |
| P7203 | K1MN08B00096 | 8P CONNECTOR | [M] |
| P7502 | K1KA10A00263 | 10P CONNECTOR | [M] |
| P7701 | K1MN08B00010 | 8P CONNECTOR | [M] |
| P31001 | K1KA14A00127 | 14P CONNECTOR | [M] |
| P36001 | K1MN19A00036 | 19P FFC CONNECTOR | [M] |
| P36002 | K1KA12A00191 | 12P CONNECTOR | [M] |
| P36004 | K1MN50A00008 | 50P CONNECTOR | [M] |
| P36005 | K1MN14A00090 | 14P CONNECTOR | [M] |
| P36007 | K1MN12A00049 | 12P FFC CONNECTOR | [M] |
| P36008 | K1MN30A00045 | 30P FFC CONNECTOR | [M] |
| | | | |
| FP8101 | K1MN50B00031 | 50P CONNECTOR | [M] |
| FP8271 | K1MN15B00041 | 15P CONNECTOR | [M] |
| FP8501 | K1MN26B00094 | 26P CONNECTOR | [M] |
| | | | |
| | | RESISTORS | |
| | | | |
| R106 | ERJ3GEYJ562V | 5.6K 1/16W | [M] |
| R107 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R110 | ERJ3GEYJ562V | 5.6K 1/16W | [M] |
| R111 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R117 | ERJ3GEYJ123V | 12K 1/16W | [M] |
| R118 | ERJ3GEYJ123V | 12K 1/16W | [M] |
| R119 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R120 | ERJ3GEYJ123V | 12K 1/16W | [M] |
| R122 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R123 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R124 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R133 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R136 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R137 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R138 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R139 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R140 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R141 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R201 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R201 | ERJ6GEYJ181V | 180 1/10W | [M] |
| R202 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R202 | ERJ6GEYF912V | 9.1K 1/10W | [M] |
| R203 | D0GZR91JA001 | 0.91 1/16W | [M] |
| R203 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R204 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R205 | D0GZR91JA001 | 0.91 1/16W | [M] |
| R205 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R206 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R207 | B4ABB0000013 | INDUCTOR | [M] |
| R207 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R208 | B4ABB0000013 | INDUCTOR | [M] |
| R208 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R209 | ERJ3GEYJ470V | 47 1/16W | [M] |
| R209 | EZMPX300F13 | RESISTOR | [M] |
| R210 | B4ABB0000013 | INDUCTOR | [M] |
| R210 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R211 | D0GB105JA002 | 1M 1/16W | [M] |
| R212 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R213 | D0GB271JA002 | 270 1/16W | [M] |
| R214 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R215 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R216 | D0GB271JA002 | 270 1/16W | [M] |
| R217 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R218 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R219 | ERJ3GEYJ392V | 3.9K 1/16W | [M] |
| R220 | ERJ3GEYJ392V | 3.9K 1/16W | [M] |
| R221 | D0GB271JA002 | 270 1/16W | [M] |
| R222 | D0GB271JA002 | 270 1/16W | [M] |
| R223 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R224 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R225 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R226 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R227 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R228 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R301 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R302 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R303 | ERJ3GEYJ392V | 3.9K 1/16W | [M] |
| R304 | ERJ3GEYJ392V | 3.9K 1/16W | [M] |
| R305 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R306 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R307 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R308 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R309 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R310 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R311 | ERJ3GEYJ391V | 390 1/16W | [M] |
| R312 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R313 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R314 | ERJ3GEYJ683V | 68K 1/16W | [M] |
| R315 | ERJ3GEYJ822V | 8.2K 1/16W | [M] |
| R316 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R317 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R318 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R319 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R320 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R321 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R322 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R323 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R324 | ERJ3GEYJ302V | 3K 1/16W | [M] |
| R325 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R326 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R327 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R328 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R329 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R330 | ERJ3GEYJ122V | 1.2K 1/16W | [M] |
| R331 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R332 | ERJ3GEYJ122V | 1.2K 1/16W | [M] |
| R333 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R334 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R335 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R336 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R337 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R338 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R339 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R340 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R341 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R342 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R343 | ERJ3GEYJ391V | 390 1/16W | [M] |
| R344 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R345 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R346 | ERJ3GEYJ272V | 2.7K 1/16W | [M] |
| R347 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R348 | ERJ3GEYJ152V | 1.5K 1/16W | [M] |
| R349 | ERJ3GEYJ272V | 2.7K 1/16W | [M] |
| R350 | ERJ3GEYJ152V | 1.5K 1/16W | [M] |
| R351 | ERJ3GEYJ563V | 56K 1/16W | [M] |
| R401 | ERJ3GEYJ563V | 56K 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R402 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R403 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R404 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R405 | ERJ3GEYJ563V | 56K 1/16W | [M] |
| R406 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R407 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R408 | ERJ3GEYJ563V | 56K 1/16W | [M] |
| R409 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R410 | ERJ3GEYJ563V | 56K 1/16W | [M] |
| R411 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R412 | ERJ3GEYJ822V | 8.2K 1/16W | [M] |
| R413 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R414 | ERJ3GEYJ563V | 56K 1/16W | [M] |
| R415 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R416 | ERJ3GEYJ563V | 56K 1/16W | [M] |
| R417 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R418 | ERJ3GEYJ822V | 8.2K 1/16W | [M] |
| R419 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R420 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R421 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R422 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R423 | ERJ3GEYJ683V | 68K 1/16W | [M] |
| R424 | ERJ3GEYJ683V | 68K 1/16W | [M] |
| R425 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R426 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R427 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R428 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R429 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R431 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R432 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R433 | ERJ3GEYJ822V | 8.2K 1/16W | [M] |
| R434 | ERJ3GEYJ822V | 8.2K 1/16W | [M] |
| R435 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R436 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R437 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R438 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R439 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R440 | ERJ3GEYJ563V | 56K 1/16W | [M] |
| R441 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R442 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R443 | ERJ3GEYJ561V | 560 1/16W | [M] |
| R444 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R445 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R446 | ERJ3GEYJ272V | 2.7K 1/16W | [M] |
| R447 | ERJ3GEYJ272V | 2.7K 1/16W | [M] |
| R448 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R449 | D0GB100JA002 | 10 1/16W | [M] |
| R450 | D0GB100JA002 | 10 1/16W | [M] |
| R451 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R452 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R453 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R454 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R455 | ERJ3GEYJ561V | 560 1/16W | [M] |
| R456 | D0GB274JA002 | 270K 1/16W | [M] |
| R457 | ERJ3GEYJ183V | 18K 1/16W | [M] |
| R458 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R459 | ERJ3GEYJ823V | 82K 1/16W | [M] |
| R460 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R461 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R462 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R463 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R464 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R465 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R466 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R467 | ERJ3GEYJ823V | 82K 1/16W | [M] |
| R468 | D0GB563JA002 | 56K 1/16W | [M] |
| R469 | D0GB563JA002 | 56K 1/16W | [M] |
| R470 | D0GB563JA002 | 56K 1/16W | [M] |
| R471 | D0GB563JA002 | 56K 1/16W | [M] |
| R472 | D0GB563JA002 | 56K 1/16W | [M] |
| R473 | D0GB563JA002 | 56K 1/16W | [M] |
| R474 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R475 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R476 | ERJ3GEYJ474V | 470K 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R477 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R478 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R479 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R480 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R481 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R482 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R483 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R484 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R485 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R486 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R487 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R488 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R489 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R490 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R503 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R504 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R505 | ERJ3GEYJ392V | 3.9K 1/16W | [M] |
| R508 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R601 | ERJ3GEYJ122V | 1.2K 1/16W | [M] |
| R602 | ERJ3GEYJ122V | 1.2K 1/16W | [M] |
| R603 | ERJ3GEYJ124V | 120K 1/16W | [M] |
| R604 | ERJ3GEYJ823V | 82K 1/16W | [M] |
| R605 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R606 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R607 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R608 | ERJ3GEYJ1R0V | 1 1/16W | [M] |
| R609 | ERJ3GEYJ1R0V | 1 1/16W | [M] |
| R610 | ERDS1FVJ820T | 82 1/2W | [M] |
| R611 | ERDS1FVJ820T | 82 1/2W | [M] |
| R612 | ERDS1FVJ820T | 82 1/2W | [M] |
| R613 | ERDS1FVJ820T | 82 1/2W | [M] |
| R614 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R615 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R616 | ERDS1FVJ5R6T | 5.6 1/2W | [M] |
| R617 | ERDS1FVJ5R6T | 5.6 1/2W | [M] |
| R618 | ERDS1FVJ5R6T | 5.6 1/2W | [M] |
| R619 | ERDS1FVJ5R6T | 5.6 1/2W | [M] |
| R620 | ERDS1FVJ4R7T | 4.7 1/2W | [M] |
| R621 | ERDS1FVJ4R7T | 4.7 1/2W | [M] |
| R622 | ERJ3GEYJ681V | 680 1/16W | [M] |
| R623 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R624 | ERJ3GEYJ561V | 560 1/16W | [M] |
| R625 | ERJ3GEYJ272V | 2.7K 1/16W | [M] |
| R626 | ERJ3GEYJ272V | 2.7K 1/16W | [M] |
| R627 | ERJ3GEYJ561V | 560 1/16W | [M] |
| R701 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R702 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R703 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R704 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R705 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R706 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R707 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R708 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R709 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R710 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R711 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R722 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R1150 | ERDS2TJ105T | 1M 1/4W | [M] |
| R1153 | ERG1SJ331E | 330 1W | [M] |
| R1154 | ERDS2TJ105T | 1M 1/4W | [M] |
| R1155 | ERDS2TJ104T | 100K 1/4W | [M] |
| R1156 | ERDS2TJ330T | 33 1/4W | [M] |
| R1157 | ERJ6GEYG472V | 4.7K 1/10W | [M] |
| R1158 | ERDS2TJ331T | 330 1/4W | [M] |
| R1159 | ERDS2TJ3R3T | 3.3 1/4W | [M] |
| R1160 | ERX1SJR22E | 0.22 1W | [M] |
| R1161 | ERDS2TJ101T | 100 1/4W | [M] |
| R1162 | ERDS2FJ102T | 1K 1/4W | [M] |
| R1163 | ERDS2FJ101T | 100 1/4W | [M] |
| R1200 | ERJ6GEYG333V | 33K 1/10W | [M] |
| R1201 | ERJ6GEYG363V | 36K 1/10W | [M] |
| R1202 | ERJ6GEYG222V | 2.2K 1/10W | [M] |
| R1203 | ERJ6GEYG243V | 24K 1/10W | [M] |
| R1204 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R1205 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R1206 | ERJ6GEYJ271V | 270 1/10W | [M] |
| R1207 | ERJ6GEYG224V | 220K 1/10W | [M] |
| R1208 | ERJ6GEYG822V | 8.2K 1/10W | [M] |
| R1230 | ERJ6GEYJ473V | 47K 1/10W | [M] |
| R1351 | ERDS2TJ471T | 470 1/4W | [M] |
| R1501 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R1502 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R1503 | ERDS2TJ151T | 150 1/4W | [M] |
| R1511 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R1512 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R1513 | ERJ6GEYJ121V | 120 1/10W | [M] |
| R2001 | ERJ3GEYJ392V | 3.9K 1/16W | [M] |
| R2002 | ERJ3GEYJ105V | 1M 1/16W | [M] |
| R2099 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R2501 | ERJ6GEYJ1R2V | 1.2 1/10W | [M] |
| R2502 | ERJ6GEYJ1R5V | 1.5 1/10W | [M] |
| R2514 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R2515 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R2516 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R2520 | ERJ3GEYJ183V | 18K 1/16W | [M] |
| R2521 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R2522 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R2523 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R2551 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R2552 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R2561 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R2562 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R2563 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R2601 | ERJ3GEYJ821V | 820 1/16W | [M] |
| R2602 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R2603 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R2604 | ERJ3GEYJ821V | 820 1/16W | [M] |
| R2605 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R2606 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R3001 | ERJ3GEYJ622V | 6.2K 1/16W | [M] |
| R3002 | ERJ3GEYJ392V | 3.9K 1/16W | [M] |
| R3003 | ERJ3GEYJ152V | 1.5K 1/16W | [M] |
| R3004 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R3005 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R3012 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R3013 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R3018 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R3020 | ERJ3GEYJ152V | 1.5K 1/16W | [M] |
| R3021 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R3024 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R3025 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R3026 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R3032 | ERJ3GEYJ685V | 6.8M 1/16W | [M] |
| R3038 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R3041 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R3700 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R3701 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R3702 | ERDS2TJ681T | 680 1/4W | [M] |
| R3703 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R3704 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R3705 | ERJ3GEYJ750V | 75 1/16W | [M] |
| R3706 | ERJ3GEYJ750V | 75 1/16W | [M] |
| R3707 | ERJ3GEYJ750V | 75 1/16W | [M] |
| R3708 | ERJ3GEYJ750V | 75 1/16W | [M] |
| R3709 | ERJ3GEYJ750V | 75 1/16W | [M] |
| R3710 | ERJ3GEYJ750V | 75 1/16W | [M] |
| R3711 | ERJ3GEYJ750V | 75 1/16W | [M] |
| R4011 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R4012 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R4015 | ERJ3GEYJ203V | 20K 1/16W | [M] |
| R4061 | D0GB334JA002 | 330K 1/16W | [M] |
| R4062 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R4063 | ERJ3GEYJ201V | 200 1/16W | [M] |
| R4071 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R4081 | ERJ3GEYJ822V | 8.2K 1/16W | [M] |
| R4082 | D0GB332JA002 | 3.3K 1/16W | [M] |
| R4083 | ERJ6GEYJ2R2V | 2.2 1/10W | [M] |
| R4084 | ERJ3GEYJ102V | 1K 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R4085 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R4086 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R4087 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R4301 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R4302 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R4303 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R4304 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R4500 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R4502 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R4505 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R4508 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R4509 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R4510 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R4513 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R4525 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R4527 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R4528 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R4529 | ERJ3GEYJ681V | 680 1/16W | [M] |
| R4534 | D0GB124JA002 | 120K 1/16W | [M] |
| R4538 | D0GB333JA002 | 33K 1/16W | [M] |
| R4539 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R4540 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R4554 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R4558 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R4563 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R4581 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R4582 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R4601 | ERJ3GEYJ333V | 33K 1/16W | [M] |
| R4602 | ERJ3GEYJ682V | 6.8K 1/16W | [M] |
| R4701 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R4702 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R4703 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R4704 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R6001 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R6002 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R6003 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R6004 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R6005 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R6006 | ERJ3GEYJ183V | 18K 1/16W | [M] |
| R6009 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R6010 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R6012 | ERJ3GEYJ561V | 560 1/16W | [M] |
| R6013 | ERJ3GEYJ105V | 1M 1/16W | [M] |
| R6016 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R6017 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R6020 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R6021 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R6022 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R6026 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R6028 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R6029 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R6102 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R6104 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R6105 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R6106 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R6107 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R6201 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R6307 | ERJ6GEYJ222V | 2.2K 1/10W | [M] |
| R6309 | ERDS2TJ821T | 820 1/4W | [M] |
| R6400 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R6401 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7001 | ERJ3GEYJ272V | 2.7K 1/16W | [M] |
| R7002 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R7003 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R7005 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R7006 | ERJ3GEYJ122V | 1.2K 1/16W | [M] |
| R7007 | ERJ3GEYJ122V | 1.2K 1/16W | [M] |
| R7008 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7009 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7010 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7011 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7013 | ERDS2TJ681T | 680 1/4W | [M] |
| R7023 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R7024 | ERJ3GEYJ102V | 1K 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R7025 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R7026 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R7027 | ERJ3GEYJ332V | 3.3K 1/16W | [M] |
| R7028 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R7030 | ERJ3GEYJ182V | 1.8K 1/16W | [M] |
| R7031 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7201 | ERDS2TJ180T | 18 1/4W | [M] |
| R7202 | ERDS2TJ180T | 18 1/4W | [M] |
| R7203 | ERJ6GEYJ562V | 5.6K 1/10W | [M] |
| R7205 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R7206 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7207 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7208 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R7209 | ERJ3GEYJ273V | 27K 1/16W | [M] |
| R7210 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7211 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7212 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7213 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7214 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7215 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7216 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7217 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7218 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7219 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7220 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7221 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7222 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7223 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7224 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R7225 | ERDS2TJ681T | 680 1/4W | [M] |
| R7226 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R7501 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R7502 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R7503 | ERJ3GEYJ123V | 12K 1/16W | [M] |
| R7504 | ERJ3GEYJ123V | 12K 1/16W | [M] |
| R7506 | ERDS2TJ682T | 6.8K 1/4W | [M] |
| R7601 | ERDS2TJ331T | 330 1/4W | [M] |
| R7602 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R7603 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R7604 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R7701 | ERJ6GEYG151V | 150 1/10W | [M] |
| R7702 | ERJ6GEYJ331V | 330 1/10W | [M] |
| R7703 | ERJ6GEYJ222V | 2.2K 1/10W | [M] P |
| R7704 | ERJ6GEYG151V | 150 1/10W | [M] |
| R7705 | ERJ6GEYJ331V | 330 1/10W | [M] |
| R7706 | ERJ6GEYJ222V | 2.2K 1/10W | [M] P |
| R7707 | ERJ6GEYG151V | 150 1/10W | [M] |
| R7708 | ERJ6GEYJ331V | 330 1/10W | [M] |
| R7709 | ERJ6GEYJ222V | 2.2K 1/10W | [M] P |
| R7710 | ERJ6GEYG151V | 150 1/10W | [M] |
| R7711 | ERJ6GEYJ331V | 330 1/10W | [M] |
| R7712 | ERJ6GEYJ222V | 2.2K 1/10W | [M] P |
| R7713 | ERJ6GEYG151V | 150 1/10W | [M] |
| R7714 | ERJ6GEYJ331V | 330 1/10W | [M] |
| R7715 | ERJ6GEYJ222V | 2.2K 1/10W | [M] P |
| R7751 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R8011 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R8021 | ERJ2GEJ103X | 10K 2W | [M] |
| R8022 | ERJ2GEJ103X | 10K 2W | [M] |
| R8023 | ERJ2GEJ473X | 47K 2W | [M] |
| R8041 | ERJ2GEJ330X | 33 2W | [M] |
| R8232 | ERJ2GEJ103X | 10K 2W | [M] |
| R8233 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R8235 | ERJ3GEYJ822V | 8.2K 1/16W | [M] |
| R8236 | ERJ3GEYJ822V | 8.2K 1/16W | [M] |
| R8241 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R8242 | ERJ3GEYJ752V | 7.5K 1/16W | [M] |
| R8251 | ERJ6GEYJ6R8V | 6.8 1/10W | [M] |
| R8271 | ERJ14YKR39U | 0.KR 1/4W | [M] |
| R8281 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R8282 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R8311 | D0HB242ZA002 | 2.4K 3W | [M] |
| R8312 | ERJ3RBD102V | 1K 3W | [M] |
| R8313 | D0HB243ZA002 | 24K 3W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R8314 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R8315 | ERJ3GEYJ6R8V | 6.8 1/16W | [M] |
| R8321 | D0HB161ZA002 | 160 3W | [M] |
| R8322 | ERJ3RED100V | 10 3W | [M] |
| R8325 | D0HB161ZA002 | 160 3W | [M] |
| R8326 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R8331 | D0HB161ZA002 | 160 3W | [M] |
| R8332 | ERJ3RED100V | 10 3W | [M] |
| R8335 | ERJ3RED820V | 82 3W | [M] |
| R8341 | ERJ3RED820V | 82 3W | [M] |
| R8401 | ERJ2GEJ473X | 47K 2W | [M] |
| R8402 | ERJ2GEJ101X | 100 2W | [M] |
| R8403 | ERJ2GEJ101X | 100 2W | [M] |
| R8404 | ERJ2GEJ101X | 100 2W | [M] |
| R8420 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R8451 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R8501 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R8550 | ERJ3GEYJ752V | 7.5K 1/16W | [M] |
| R8551 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R8552 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R8553 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R8554 | ERJ3GEYJ220V | 22 1/16W | [M] |
| R8555 | ERJ3GEYJ2R2V | 2.2 1/16W | [M] |
| R8556 | ERJ3GEYJ560V | 56 1/16W | [M] |
| R8557 | ERJ3GEYJ510V | 51 1/16W | [M] |
| R8558 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R8559 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R8560 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R8561 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R8562 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R8563 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R8564 | ERJ3GEYJ100V | 10 1/16W | [M] |
| R8565 | ERJ3GEYJ2R2V | 2.2 1/16W | [M] |
| R8566 | ERJ3GEYJ560V | 56 1/16W | [M] |
| R8567 | ERJ3GEYJ510V | 51 1/16W | [M] |
| R8568 | ERJ3GEYJ473V | 47K 1/16W | [M] |
| R8569 | ERJ3GEYJ123V | 12K 1/16W | [M] |
| R8570 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R8601 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R8605 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R8606 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R8611 | ERJ2GEJ101X | 100 2W | [M] |
| R8621 | ERJ3GEYJ105V | 1M 1/16W | [M] |
| R8622 | ERJ3RBD471V | 470 3W | [M] |
| R33001 | ERDS2TJ271T | 270 1/4W | [M] |
| R33004 | ERJ6GEYG151V | 150 1/10W | [M] |
| R33005 | ERJ6GEYG222V | 2.2K 1/10W | [M] |
| R33007 | ERJ6GEYG222V | 2.2K 1/10W | [M] |
| R33008 | ERJ6GEYG222V | 2.2K 1/10W | [M] |
| R33009 | ERJ6GEYG223V | 22K 1/10W | [M] |
| R33010 | ERDS2TJ103T | 10K 1/4W | [M] |
| R33012 | ERDS2TJ272T | 2.7K 1/4W | [M] |
| R33013 | ERJ3GEYJ104V | 100K 1/16W | [M] |
| R33014 | ERDS2TJ220T | 22 1/4W | [M] |
| R33015 | ERDS2TJ220T | 22 1/4W | [M] |
| R33016 | ERDS2TJ220T | 22 1/4W | [M] |
| R33017 | ERJ6GEYJ331V | 330 1/10W | [M] |
| R34002 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R34003 | ERDS2TJ471T | 470 1/4W | [M] |
| R34004 | ERDS2TJ471T | 470 1/4W | [M] |
| R34005 | ERJ3GEYJ562V | 5.6K 1/16W | [M] |
| R34426 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R34427 | ERJ3GEYJ472V | 4.7K 1/16W | [M] |
| R34428 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R34429 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| R36001 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36002 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36003 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36004 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R36005 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36006 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36007 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R36008 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36009 | ERJ3GEYJ223V | 22K 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R36010 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R36011 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R36012 | ERJ3GEYJ471V | 470 1/16W | [M] |
| R36013 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36014 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36015 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36016 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36017 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36018 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36019 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36020 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36021 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36022 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36023 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36024 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R36025 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36026 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36027 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36028 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36029 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36030 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R36031 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R36032 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R36033 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R36034 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36035 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36036 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36037 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36038 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36039 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R36040 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R36041 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36042 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36043 | ERJ3GEYJ681V | 680 1/16W | [M] |
| R36044 | ERJ3GEYJ681V | 680 1/16W | [M] |
| R36045 | ERJ3GEYJ681V | 680 1/16W | [M] |
| R36046 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R36047 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R36048 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36049 | ERJ3GEYJ101V | 100 1/16W | [M] |
| R36050 | ERJ3GEYJ821V | 820 1/16W | [M] |
| R36051 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R36052 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R36053 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36054 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36055 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36056 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36057 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36058 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36059 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36060 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36061 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36062 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R36063 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R36064 | ERJ3GEYJ223V | 22K 1/16W | [M] |
| R36065 | ERJ3GEYJ223V | 22K 1/16W | [M]PC |
| R36066 | ERJ3GEYJ223V | 22K 1/16W | [M]PC |
| R36067 | ERJ3GEYJ472V | 4.7K 1/16W | [M]PC |
| R36074 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36075 | ERJ3GEY0R00V | 0 1/16W | [M] |
| R36076 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R36077 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R36078 | ERDS2TJ272T | 2.7K 1/4W | [M] |
| R36080 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36081 | ERJ3GEYJ153V | 15K 1/16W | [M] |
| R36082 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36083 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36084 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36085 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36086 | ERJ6GEYJ681V | 680 1/10W | [M] |
| R36087 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36088 | ERJ3GEYJ331V | 330 1/16W | [M] |
| R36089 | ERJ6GEYG473V | 47K 1/10W | [M] |
| R36090 | ERJ3GEYJ331V | 330 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R36091 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36092 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36093 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36094 | ERJ3GEYJ821V | 820 1/16W | [M] |
| R36096 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36100 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36101 | ERJ3GEYJ221V | 220 1/16W | [M] |
| R36102 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R36103 | ERJ6GEYJ221V | 220 1/10W | [M] |
| R36104 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| | | | |
| K8100 | ERJ3GEY0R00V | 0 1/16W | [M] |
| K8321 | ERJ2GE0R00X | 0 1/4W | [M] |
| K8325 | ERJ2GE0R00X | 0 1/4W | [M] |
| K8331 | ERJ2GE0R00X | 0 1/4W | [M] |
| K8335 | ERJ2GE0R00X | 0 1/4W | [M] |
| K8341 | ERJ2GE0R00X | 0 1/4W | [M] |
| K8421 | ERJ3GEY0R00V | 0 1/16W | [M] |
| K8651 | ERJ2GE0R00X | 0 1/4W | [M] |
| K36002 | ERJ3GEY0R00V | 0 1/16W | [M] |
| | | | |
| LB1120 | VLP0056-T | BEAD CORE | [M] |
| LB1211 | J0JHC0000012 | INDUCTOR | [M] |
| LB1213 | J0JHC0000012 | INDUCTOR | [M] |
| LB3700 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB3701 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB3702 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB3703 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB3704 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB4701 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB4702 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB4703 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB4704 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8001 | J0JHC0000045 | CHIP INDUCTOR | [M] |
| LB8002 | J0JHC0000045 | CHIP INDUCTOR | [M] |
| LB8011 | ERJ3GEYJ220V | 22 1/16W | [M] |
| LB8271 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8272 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8273 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8301 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8302 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8303 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8304 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8305 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8401 | ERJ3GEYJ151V | 150 1/16W | [M] |
| LB8420 | J0JCC0000091 | FILTER | [M] |
| LB8421 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8422 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8423 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8424 | J0JCC0000091 | FILTER | [M] |
| LB8451 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8452 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8453 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8454 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8455 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8456 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8491 | J0JCC0000119 | FERRITE BEAD | [M] |
| LB8501 | ERJ3GEYJ222V | 2.2K 1/16W | [M] |
| LB8502 | J0JHC0000045 | CHIP INDUCTOR | [M] |
| LB8503 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8504 | J0JCC0000091 | FILTER | [M] |
| LB8505 | J0JCC0000091 | FILTER | [M] |
| LB8506 | ERJ3GEYJ152V | 1.5K 1/16W | [M] |
| LB8507 | J0JCC0000091 | FILTER | [M] |
| LB8511 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8512 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8513 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8514 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB8690 | J0JCC0000091 | FILTER | [M] |
| LB8691 | ERJ3GEYJ101V | 100 1/16W | [M] |
| LB8692 | ERJ3GEYJ101V | 100 1/16W | [M] |
| LB8693 | ERJ3GEYJ101V | 100 1/16W | [M] |
| LB33001 | J0JCC0000188 | CHIP COIL | [M] |
| LB33002 | ERJ3GEY0R00V | 0 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| LB33003 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB33004 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB33005 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB33006 | J0JHC0000021 | CHIP COIL | [M] |
| LB33007 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB33008 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB33009 | ERJ3GEY0R00V | 0 1/16W | [M] |
| LB33010 | J0JCC0000188 | CHIP COIL | [M] |
| LB33011 | J0JCC0000188 | CHIP COIL | [M] |
| LB33012 | J0JCC0000188 | CHIP COIL | [M] |
| LB33013 | J0JCC0000188 | CHIP COIL | [M] |
| | | | |
| RA8011 | D1H88204A024 | RESISTOR | [M] |
| RA8012 | D1H88204A024 | RESISTOR | [M] |
| RA8013 | D1H88204A024 | RESISTOR | [M] |
| RA8014 | D1H88204A024 | RESISTOR | [M] |
| RA8015 | D1H422020001 | RESISTOR | [M] |
| RA8016 | D1H88204A024 | RESISTOR | [M] |
| RA8017 | D1H88204A024 | RESISTOR | [M] |
| RA8018 | D1H88204A024 | RESISTOR | [M] |
| RA8021 | D1H410320002 | RESISTOR | [M] |
| RA8031 | D1H447220001 | RESISTOR | [M] |
| RA8032 | D1H447220001 | RESISTOR | [M] |
| RA8271 | D1H410320002 | RESISTOR | [M] |
| RA8401 | D1H410120001 | RESISTOR | [M] |
| RA8402 | D1H410120001 | RESISTOR | [M] |
| RA8501 | D1H456020001 | RESISTOR | [M] |
| RA8502 | D1H85604A024 | RESISTOR | [M] |
| RA8503 | D1H456020001 | RESISTOR | [M] |
| RA8504 | D1H456020001 | RESISTOR | [M] |
| RA8611 | D1H447220001 | RESISTOR | [M] |
| | | | |
| | | CAPACITORS | |
| | | | |
| C11 | F1D1E103A001 | 0.01 25V | [M] |
| C12 | F2A1C101A235 | 100P 16V | [M] |
| C21 | F1D1E103A001 | 0.01 25V | [M] |
| C22 | F2A1C101A235 | 100P 16V | [M] |
| C103 | ECEA1CKA100B | 10 16V | [M] |
| C104 | ECEA1CKA100B | 10 16V | [M] |
| C105 | ECEA1CKA100B | 10 16V | [M] |
| C106 | ECEA1CKA100B | 10 16V | [M] |
| C113 | ECJ1VC1H101J | 100P 50V | [M] |
| C114 | ECJ1VC1H101J | 100P 50V | [M] |
| C115 | ECJ1VC1H101J | 100P 50V | [M] |
| C116 | ECJ1VC1H101J | 100P 50V | [M] |
| C120 | ECEA1CKA220B | 22 16V | [M] |
| C121 | ECEA1CKA220B | 22 16V | [M] |
| C122 | ECEA1CKA220B | 22 16V | [M] |
| C123 | ECEA1CKA220B | 22 16V | [M] |
| C124 | ECEA1CKA220B | 22 16V | [M] |
| C125 | ECEA1CKA220B | 22 16V | [M] |
| C126 | ECJ1VC1H101J | 100P 50V | [M] |
| C127 | ECJ1VC1H101J | 100P 50V | [M] |
| C128 | ECJ1VC1H101J | 100P 50V | [M] |
| C129 | ECJ1VC1H101J | 100P 50V | [M] |
| C130 | ECJ1VC1H101J | 100P 50V | [M] |
| C131 | ECJ1VC1H101J | 100P 50V | [M] |
| C201 | ECJ1VC1H101J | 100P 50V | [M] |
| C201 | ECJ2YB1H104K | 0.1 50V | [M] |
| C202 | ECJ1VC1H101J | 100P 50V | [M] |
| C203 | ECA1HAK010XB | 1 50V | [M] |
| C204 | ECA1HAK010XB | 1 50V | [M] |
| C204 | F1J1E104A081 | 0.1 25V | [M] |
| C205 | ECJ1VC1H101J | 100P 50V | [M] |
| C205 | F1J1E104A081 | 0.1 25V | [M] |
| C206 | ECJ1VC1H101J | 100P 50V | [M] |
| C206 | ECJ2VB1H102K | 1000P 50V | [M] |
| C207 | ECA1HAK010XB | 1 50V | [M] |
| C207 | ECJ2VB1H153K | 0.015 50V | [M] |
| C208 | ECA1HAK010XB | 1 50V | [M] |
| C209 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C210 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C211 | ECA1AM221B | 220 10V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C212 | ECJ2VB1H223K | 0.022 50V | [M] |
| C213 | ECJ2VF1H104Z | 0.1 50V | [M]PC |
| C213 | F1H1C104A065 | 0.1 16V | [M]P |
| C214 | ECJ1VC1H050C | 5P 50V | [M] |
| C215 | ECJ1VC1H120J | 12P 50V | [M] |
| C216 | ECA1CAK101XB | 100 16V | [M] |
| C217 | F1H1A105A025 | 1 10V | [M] |
| C218 | F1H1C104A065 | 0.1 16V | [M] |
| C219 | F1H1A105A025 | 1 10V | [M] |
| C220 | ECJ1VB1H222K | 2200P 50V | [M] |
| C221 | F1H1A105A025 | 1 10V | [M] |
| C222 | ECJ1VB1H222K | 2200P 50V | [M] |
| C223 | ECJ2VB1H223K | 0.022 50V | [M] |
| C224 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C225 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C226 | F1H1A105A025 | 10 10V | [M] |
| C227 | ECA1CAK101XB | 100 16V | [M] |
| C228 | ECA1CAK470XB | 47 16V | [M] |
| C229 | ECA1CAK101XB | 100 16V | [M] |
| C230 | F1H1C104A065 | 0.1 16V | [M] |
| C231 | F1H1A105A025 | 10 10V | [M] |
| C232 | F1H1A105A025 | 10 10V | [M] |
| C233 | F1H1C104A065 | 0.1 16V | [M] |
| C234 | ECJ1VB1H222K | 2200P 50V | [M] |
| C235 | ECJ1VB1H222K | 2200P 50V | [M] |
| C236 | F1H1C104A065 | 0.1 16V | [M] |
| C237 | ECJ1VC1H101J | 100P 50V | [M] |
| C238 | ECJ1VC1H101J | 100P 50V | [M] |
| C239 | ECA1CAK100XB | 10 16V | [M] |
| C240 | ECA1CAK100XB | 10 16V | [M] |
| C241 | ECJ1VB1H103K | 0.01 50V | [M] |
| C242 | ECJ1VC1H470J | 47P 50V | [M] |
| C243 | ECJ1VC1H101J | 100P 50V | [M] |
| C244 | ECJ1VC1H101J | 100P 50V | [M] |
| C245 | ECJ1VC1H470J | 47P 50V | [M] |
| C246 | ECJ1VB1H103K | 0.01 50V | [M] |
| C247 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C301 | ECJ1VB1H471K | 470P 50V | [M] |
| C302 | ECJ1VB1H471K | 470P 50V | [M] |
| C303 | ECJ1VB1H471K | 470P 50V | [M] |
| C304 | ECJ1VB1H471K | 470P 50V | [M] |
| C305 | ECJ1VB1H471K | 470P 50V | [M] |
| C306 | ECJ1VB1H471K | 470P 50V | [M] |
| C307 | ECJ1VB1H102K | 1000P 50V | [M] |
| C308 | ECJ1VB1H103K | 0.01 50V | [M] |
| C309 | ECJ1VB1H103K | 0.01 50V | [M] |
| C310 | ECJ1VB1H103K | 0.01 50V | [M] |
| C311 | ECJ1VB1H103K | 0.01 50V | [M] |
| C312 | ECJ1VC1H101J | 100P 50V | [M] |
| C313 | ECJ1VC1H330J | 33P 50V | [M] |
| C314 | ECJ1VB1H102K | 1000P 50V | [M] |
| C315 | F1H1A105A025 | 1 10V | [M] |
| C316 | ECA1CAK100XB | 10 16V | [M] |
| C317 | ECJ1VC1H101J | 100P 50V | [M] |
| C318 | ECA1CAK100XB | 10 16V | [M] |
| C319 | ECJ1VC1H101J | 100P 50V | [M] |
| C320 | ECJ1VC1H101J | 100P 50V | [M] |
| C321 | F1H1A105A025 | 1 10V | [M] |
| C322 | ECJ1VC1H330J | 33P 50V | [M] |
| C323 | ECA1CAK100XB | 10 16V | [M] |
| C324 | ECJ1VC1H330J | 33P 50V | [M] |
| C325 | F1H1A105A025 | 1 10V | [M] |
| C326 | F1H1A105A025 | 1 10V | [M] |
| C327 | F1H1A105A025 | 1 10V | [M] |
| C328 | F1H1A105A025 | 1 10V | [M] |
| C329 | F1H1A105A025 | 1 10V | [M] |
| C330 | F1H1A105A025 | 1 10V | [M] |
| C331 | F1H1A105A025 | 1 10V | [M] |
| C332 | F1H1A105A025 | 1 10V | [M] |
| C333 | F1H1C104A065 | 0.1 16V | [M] |
| C334 | F1H1A105A025 | 1 10V | [M] |
| C335 | F1H1A105A025 | 1 10V | [M] |
| C336 | ECJ1VB1H102K | 1000P 50V | [M] |
| C337 | ECJ2VB1H153K | 0.015 50V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C338 | ECA1HAKR33XB | 0.33 50V | [M] |
| C339 | F1H1C104A065 | 0.1 16V | [M] |
| C340 | ECJ1VB1H102K | 1000P 50V | [M] |
| C341 | ECJ2VB1H153K | 0.015 50V | [M] |
| C342 | ECA1CAK100XB | 10 16V | [M] |
| C343 | ECA1CAK100XB | 10 16V | [M] |
| C344 | ECA1HAKR33XB | 0.33 50V | [M] |
| C345 | F1H1A105A025 | 1 10V | [M] |
| C346 | F1H1A105A025 | 1 10V | [M] |
| C347 | F1H1A105A025 | 1 10V | [M] |
| C348 | F1H1A105A025 | 1 10V | [M] |
| C349 | ECJ1VC1H470J | 47P 50V | [M] |
| C350 | ECJ1VC1H470J | 47P 50V | [M] |
| C351 | F1H1A105A025 | 1 10V | [M] |
| C352 | F1H1C104A065 | 0.1 16V | [M] |
| C401 | ECA1CAK100XB | 10 16V | [M] |
| C402 | F1H1A105A025 | 1 10V | [M] |
| C403 | ECA1HAK010XB | 1 50V | [M] |
| C404 | ECA1HAK010XB | 1 50V | [M] |
| C405 | ECJ1VB1H103K | 0.01 50V | [M] |
| C406 | ECJ1VC1H470J | 47P 50V | [M] |
| C407 | ECJ1VC1H101J | 100P 50V | [M] |
| C408 | ECJ1VC1H101J | 100P 50V | [M] |
| C409 | ECJ1VC1H470J | 47P 50V | [M] |
| C410 | F1H1A105A025 | 1 10V | [M] |
| C411 | ECJ1VB1H103K | 0.01 50V | [M] |
| C412 | ECA1CAK100XB | 10 16V | [M] |
| C413 | ECA1CAK100XB | 10 16V | [M] |
| C414 | ECJ2VB1H333K | 0.033 50V | [M] |
| C415 | ECEA1HKAR47B | 0.47 50V | [M] |
| C416 | ECEA1HKAR47B | 0.47 50V | [M] |
| C417 | ECA1CAK100XB | 10 16V | [M] |
| C419 | ECJ1VB1H102K | 1000P 50V | [M] |
| C420 | ECJ1VB1H102K | 1000P 50V | [M] |
| C421 | ECJ2VB1H333K | 0.033 50V | [M] |
| C422 | F1H1C104A065 | 0.1 16V | [M] |
| C423 | F1H1C104A065 | 0.1 16V | [M] |
| C424 | ECJ1VC1H101J | 100P 50V | [M] |
| C425 | ECJ1VC1H101J | 100P 50V | [M] |
| C426 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C427 | ECJ1VC1H101J | 100P 50V | [M] |
| C428 | ECJ1VB1H103K | 0.01 50V | [M] |
| C429 | ECJ1VB1H102K | 1000P 50V | [M] |
| C430 | ECA1CAK100XB | 10 16V | [M] |
| C431 | ECJ1VB1H103K | 0.01 50V | [M] |
| C432 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C433 | ECJ1VC1H101J | 100P 50V | [M] |
| C434 | ECJ1VC1H330J | 33P 50V | [M] |
| C435 | ECJ1VC1H101J | 100P 50V | [M] |
| C436 | F1H1C104A065 | 0.1 16V | [M] |
| C437 | F1H1A105A025 | 1 10V | [M] |
| C438 | F1H1A105A025 | 1 10V | [M] |
| C439 | ECJ1VB1C393K | 0.039 16V | [M] |
| C440 | ECA1CAK470XB | 47 16V | [M] |
| C441 | ECA1CAK100XB | 10 16V | [M] |
| C442 | ECA1CAK470XB | 47 16V | [M] |
| C443 | ECJ1VB1H152K | 1500P 50V | [M] |
| C444 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C445 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C446 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C447 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C448 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C449 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C450 | ECJ1VC1H101J | 100P 50V | [M] |
| C451 | ECJ1VC1H330J | 33P 50V | [M] |
| C452 | F1H1C104A065 | 0.1 16V | [M] |
| C453 | ECJ1VB1C333K | 0.033 16V | [M] |
| C454 | ECJ1VB1H222K | 2200P 50V | [M]PC |
| C454 | F1H1A154A025 | 0.15 10V | [M]P |
| C455 | ECJ1VB1H473K | 0.047 50V | [M] |
| C456 | ECA1CAK100XB | 10 16V | [M] |
| C458 | ECA1CAK100XB | 10 16V | [M] |
| C459 | ECA1CAK100XB | 10 16V | [M] |
| C460 | ECA1CAK100XB | 10 16V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C490 | F1H1C104A065 | 0.1 16V | [M] |
| C491 | F1H1C104A065 | 0.1 16V | [M] |
| C502 | ECEA1HKAR47B | 0.47 50V | [M] |
| C503 | F1H1A105A025 | 1 10V | [M] |
| C504 | F1H1A105A025 | 1 10V | [M] |
| C505 | ECJ1VC1H101J | 100P 50V | [M] |
| C506 | ECJ1VC1H330J | 33P 50V | [M] |
| C508 | ECA1HAK0R1XB | 0.1 50V | [M] |
| C601 | ECJ1VB1H103K | 0.01 50V | [M] |
| C602 | ECJ1VB1H103K | 0.01 50V | [M] |
| C603 | ECJ1VB1H103K | 0.01 50V | [M] |
| C604 | ECJ1VB1H103K | 0.01 50V | [M] |
| C605 | ECEA1CKA100B | 10 16V | [M] |
| C606 | ECEA1CKA100B | 10 16V | [M] |
| C607 | ECEA1HKA4R7B | 4.7 50V | [M] |
| C608 | ECQE1104KF3 | 0.1 100V | [M] |
| C609 | ECA1EM102B | 1000 25V | [M] |
| C610 | F2A1E2220046 | 2200P 25V | [M] |
| C611 | ECA1EM102B | 1000 25V | [M] |
| C612 | ECA1CM101B | 100 16V | [M] |
| C613 | ECJ1VB1H103K | 0.01 50V | [M] |
| C614 | F1B1H103A007 | 0.01 50V | [M] |
| C615 | ECA1CM101B | 100 16V | [M] |
| C616 | ECA1CM100B | 10 16V | [M] |
| C701 | F1H1A105A025 | 1 10V | [M] |
| C702 | F1H1A105A025 | 1 10V | [M] |
| C703 | ECJ1VC1H101J | 100P 50V | [M] |
| C704 | ECJ1VC1H101J | 100P 50V | [M] |
| C705 | ECJ1VC1H330J | 33P 50V | [M] |
| C706 | ECJ1VB1H471K | 470P 50V | [M] |
| C707 | ECJ1VB1H471K | 470P 50V | [M] |
| C708 | ECEA1CKA100B | 10 16V | [M] |
| C709 | ECEA1CKA100B | 10 16V | [M] |
| C711 | ECJ1VC1H101J | 100P 50V | [M] |
| C712 | ECJ1VC1H101J | 100P 50V | [M] |
| C713 | ECJ1VC1H330J | 33P 50V | [M] |
| C714 | ECJ1VB1H103K | 0.01 50V | [M] |
| C715 | ECJ1VB1H103K | 0.01 50V | [M] |
| C716 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C717 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C1121 | ECQU2A683MVA | 0.068 100V | [M] |
| C1125 | F1BAF1020020 | 2P 10V | [M] |
| C1126 | F1BAF331A013 | 31 10V | [M] |
| C1128 | ECQU2A223MVA | 0.022 100V | [M] |
| C1140 | EEUEB2E101SE | 100P 250V | [M] |
| C1151 | ECQB1H223JF3 | 0.022 50V | [M] |
| C1152 | ECQB1H103JF3 | 0.01 50V | [M] |
| C1153 | ECQV1H104JL3 | 0.1 50V | [M] |
| C1154 | ECQB1H223JF3 | 0.022 50V | [M] |
| C1155 | ECKN3A271KBP | 270P 1000 | [M] |
| C1200 | ECQV1H104JL3 | 0.1 50V | [M] |
| C1210 | ECKN3A272KBP | 2700P 1000 | [M] |
| C1230 | ECA1HM220B | 22 50V | [M] |
| C1240 | F2A1A1020056 | 1000P 10V | [M] |
| C1241 | ECA0JM221B | 220 6.3V | [M] |
| C1250 | F2A1E6810011 | 680P 25V | [M] |
| C1251 | ECA1EM101B | 100 25V | [M] |
| C1260 | F2A1A1020056 | 1000P 10V | [M] |
| C1261 | F2A1A1020056 | 1000P 10V | [M] |
| C1262 | ECA1AM221B | 220 10V | [M] |
| C1270 | F2A1H470A147 | 47P 50V | [M] |
| C1280 | F2A1H1010044 | 100P 50V | [M] |
| C1290 | F2A1C6810023 | 680P 16V | [M] |
| C1291 | ECA1CM101B | 100 16V | [M] |
| C1310 | ECJ2VF1H104Z | 0.1 50V | [M] |
| C1351 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C1352 | ECEA0JKA470B | 47 6.3V | [M] |
| C2001 | ECJ1VC1H330J | 33P 50V | [M] |
| C2003 | ECJ1VF1A105Z | 1 10V | [M] |
| C2051 | ECEA0JKN220B | 22 6.3V | [M] |
| C2053 | ECEA1CKA100B | 10 16V | [M] |
| C2054 | ECJ1VB1H392K | 3900P 50V | [M] |
| C2055 | ECJ1VF1C104Z | 0.1 16V | [M] |
| C2099 | ECJ1VC1H681J | 680P 50V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C2501 | ECJ1VF1C104Z | 0.1 16V | [M] |
| C2502 | ECEA0JKA221B | 220 6.3V | [M] |
| C2504 | ECJ1VB1E223K | 0.022 25V | [M] |
| C2505 | ECJ1VB1E223K | 0.022 25V | [M] |
| C2506 | F1H1A224A025 | 0.22 10V | [M] |
| C2507 | ECJ1VB1H102K | 1000P 50V | [M] |
| C2508 | ECJ1VB1H182K | 1800P 50V | [M] |
| C2509 | ECEA1CKA220B | 22 16V | [M] |
| C2510 | F1H1C104A065 | 0.1 16V | [M] |
| C2511 | F1H1C104A065 | 0.1 16V | [M] |
| C2512 | F1H1C104A065 | 0.1 16V | [M] |
| C2513 | ECJ1VF1A105Z | 1 10V | [M] |
| C2515 | F1H1H103A730 | 0.01 50V | [M] |
| C2518 | F1H1H103A730 | 0.01 50V | [M] |
| C2519 | F1H1H103A730 | 0.01 50V | [M] |
| C2520 | F1H1C104A065 | 0.1 16V | [M] |
| C2551 | ECJ1VB1C563K | 0.056 16V | [M] |
| C2552 | ECJ1VB1C563K | 0.056 16V | [M] |
| C2561 | ECJ1VB1C563K | 0.056 16V | [M] |
| C2562 | ECJ1VB1C563K | 0.056 16V | [M] |
| C2571 | ECA1EM221B | 220 25V | [M] |
| C2572 | ECA1EM101B | 100 25V | [M]P |
| C2572 | ECA1EM221B | 220 25V | [M]PC |
| C2601 | F1H1H103A730 | 0.01 50V | [M] |
| C2602 | F1H1H103A730 | 0.01 50V | [M] |
| C3002 | F1H1C104A065 | 0.1 16V | [M] |
| C3003 | F1H1C104A065 | 0.1 16V | [M] |
| C3004 | ECJ1VC1H151J | 150P 50V | [M] |
| C3005 | F1H1C104A065 | 0.1 16V | [M] |
| C3006 | ECJ1VB1C105K | 10 16V | [M] |
| C3007 | ECJ1VC1H330J | 33P 50V | [M] |
| C3008 | ECEA1HKA4R7B | 4.7 50V | [M] |
| C3010 | ECJ1VB1C105K | 10 16V | [M] |
| C3011 | ECEA0JKA470B | 47 6.3V | [M] |
| C3012 | F1H1C104A065 | 0.1 16V | [M] |
| C3013 | F1H1C104A065 | 0.1 16V | [M] |
| C3015 | F1H1C104A065 | 0.1 16V | [M] |
| C3016 | F1H1A105A025 | 10 10V | [M] |
| C3017 | F1H1C104A065 | 0.1 16V | [M] |
| C3019 | F1H1C104A065 | 0.1 16V | [M] |
| C3020 | ECEA1EKA3R3B | 3.3 25V | [M] |
| C3021 | ECEA1CKA100B | 10 16V | [M] |
| C3022 | F1H1H103A748 | 0.01 50V | [M] |
| C3025 | ECJ1VC1H331J | 330P 50V | [M] |
| C3027 | ECJ2VB1H103K | 0.01 50V | [M] |
| C3028 | ECEA0JKA470B | 47 6.3V | [M] |
| C3029 | F1H1H103A730 | 0.01 50V | [M] |
| C3030 | F1H1H103A730 | 0.01 50V | [M] |
| C3031 | F1H1C104A065 | 0.1 16V | [M] |
| C3032 | ECEA0JKA470B | 47 6.3V | [M] |
| C3033 | ECJ1VB1C105K | 10 16V | [M] |
| C3034 | ECJ1VC1H020C | 2P 50V | [M] |
| C3035 | F1H1C104A065 | 0.1 16V | [M] |
| C3036 | ECEA1EKA3R3B | 3.3 25V | [M] |
| C3037 | ECEA1HKA2R2B | 2.2 50V | [M] |
| C3038 | ECJ1VB1H472K | 4700P 50V | [M] |
| C3039 | ECJ1VB1C333K | 0.033 16V | [M] |
| C3040 | F1H1A474A025 | 0.47 10V | [M] |
| C3041 | ECJ1VB1E223K | 0.022 25V | [M] |
| C3042 | ECEA1EKA4R7B | 4.7 25V | [M] |
| C3047 | ECJ1VF1C104Z | 0.1 16V | [M] |
| C3052 | F1H1C104A065 | 0.1 16V | [M] |
| C3053 | F1H1C104A065 | 0.1 16V | [M] |
| C3062 | ECEA1CKA100B | 10 16V | [M] |
| C3065 | F1H1C104A065 | 0.1 16V | [M] |
| C3066 | F1H1C104A065 | 0.1 16V | [M] |
| C3099 | ECEA0JKA101B | 100 6.3V | [M] |
| C3701 | F1H1C104A065 | 0.1 16V | [M] |
| C3702 | F1H1H103A730 | 0.01 50V | [M] |
| C3703 | F1H1H103A730 | 0.01 50V | [M] |
| C3704 | F2A0J471A247 | 470P 6.3V | [M] |
| C3705 | F1H1C104A065 | 0.1 16V | [M] |
| C4010 | ECEA1CKA100B | 10 16V | [M] |
| C4018 | ECEA0JKA220B | 22 6.3V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C4041 | ECEA1EKA4R7B | 4.7 25V | [M] |
| C4042 | ECEA1EKA4R7B | 4.7 25V | [M] |
| C4061 | ECJ1VB1H103K | 0.01 50V | [M] |
| C4062 | ECEA0JKA330B | 33 6.3V | [M] |
| C4063 | ECEA1HKA3R3B | 3.3 50V | [M] |
| C4064 | ECJ1VB1H182K | 1800P 50V | [M] |
| C4065 | ECJ1VB1H182K | 1800P 50V | [M] |
| C4081 | ECQB1H223JM3 | 0.022 50V | [M] |
| C4082 | ECJ1VB1H471K | 470P 50V | [M] |
| C4083 | ECEA0JKA470B | 47 6.3V | [M] |
| C4084 | ECJ1VB1H182K | 1800P 50V | [M] |
| C4085 | ECJ1VB1C683K | 0.068 16V | [M] |
| C4303 | F2A1HR22A009 | 22 50V | [M] |
| C4304 | F2A1HR22A009 | 22 50V | [M] |
| C4501 | F1H1C104A041 | 0.1 16V | [M] |
| C4502 | ECEA1CKA100B | 10 16V | [M] |
| C4503 | ECEA1CKA100B | 10 16V | [M] |
| C4504 | ECEA1CKA100B | 10 16V | [M] |
| C4505 | ECEA0JKA330B | 33 6.3V | [M] |
| C4506 | ECEA1CKA100B | 10 16V | [M] |
| C4507 | ECEA0JKA220B | 22 6.3V | [M] |
| C4508 | ECJ1VB1C333K | 0.033 16V | [M] |
| C4509 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C4510 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C4511 | F1H1C104A041 | 0.1 16V | [M] |
| C4512 | ECJ1VB1A224K | 0.22 10V | [M] |
| C4513 | ECEA0JKA220B | 22 6.3V | [M] |
| C4514 | ECEA1CKA100B | 10 16V | [M] |
| C4515 | ECEA0JKA330B | 33 6.3V | [M] |
| C4516 | ECEA1CKA100B | 10 16V | [M] |
| C4517 | ECEA0JKA220B | 22 6.3V | [M] |
| C4519 | ECA1CAK100XB | 10 16V | [M] |
| C4520 | ECA1CAK100XB | 10 16V | [M] |
| C4521 | ECEA1CKA100B | 10 16V | [M] |
| C4522 | ECEA0JKA220B | 22 6.3V | [M] |
| C4523 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C4524 | F1H1C104A041 | 0.1 16V | [M] |
| C4525 | ECEA1CKA220B | 22 16V | [M] |
| C4530 | ECJ1VC1H151J | 150P 50V | [M] |
| C4531 | ECJ1VC1H151J | 150P 50V | [M] |
| C4534 | ECQB1H153JF3 | 0.015 50V | [M] |
| C4535 | ECQB1H153JF3 | 0.015 50V | [M] |
| C4536 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C4537 | ECJ2VC1H560G | 56P 50V | [M] |
| C4538 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C4563 | F1H1C104A041 | 0.1 16V | [M] |
| C4565 | F1H1C104A041 | 0.1 16V | [M] |
| C4567 | ECEA1EKA3R3B | 3.3 25V | [M] |
| C4568 | ECJ1VB1H103K | 0.01 50V | [M] |
| C4570 | F1H1C104A041 | 0.1 16V | [M] |
| C4572 | ECEA1HKA2R2B | 2.2 50V | [M] |
| C4574 | ECEA1HKA3R3B | 3.3 50V | [M] |
| C4575 | F1H1C104A041 | 0.1 16V | [M] |
| C4576 | ECJ1VB1C223K | 0.022 16V | [M] |
| C4577 | ECEA1CKA100B | 10 16V | [M] |
| C4578 | F1H1A105A025 | 1 10V | [M] |
| C4601 | ECEA1CKA100B | 10 16V | [M] |
| C5001 | F1H1H103A748 | 0.01 50V | [M] |
| C5002 | F1H1H103A748 | 0.01 50V | [M] |
| C5003 | F1H1H103A748 | 0.01 50V | [M] |
| C5004 | F1H1H103A748 | 0.01 50V | [M] |
| C5005 | ECEA0JKA101B | 100 6.3V | [M] |
| C5006 | F1H1C104A065 | 0.1 16V | [M] |
| C6001 | ECJ1VC1H180J | 18P 50V | [M] |
| C6002 | ECJ1VC1H220J | 22P 50V | [M] |
| C6003 | ECJ1VC1H180J | 18P 50V | [M] |
| C6004 | ECJ1VC1H180J | 18P 50V | [M] |
| C6005 | ECEA1HKA3R3B | 3.3 50V | [M] |
| C6006 | ECJ1VC1H101J | 100P 50V | [M] |
| C6007 | ECJ1VC1H820J | 82P 50V | [M] |
| C6008 | ECJ1VC1H471J | 470P 50V | [M] |
| C6009 | F1H1H103A730 | 0.01 50V | [M] |
| C6010 | F1H1H103A730 | 0.01 50V | [M] |
| C6011 | F1H1H103A730 | 0.01 50V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C6013 | ECJ1VF1A105Z | 1 10V | [M] |
| C6014 | ECJ1VB1H102K | 1000P 50V | [M] |
| C6015 | ECJ1VB1C333K | 0.033 16V | [M] |
| C6016 | ECJ1VB1H102K | 1000P 50V | [M] |
| C6017 | ECJ1VC1H471J | 470P 50V | [M] |
| C6101 | ECJ2VF1H104Z | 0.1 50V | [M] |
| C6102 | F1H1H103A730 | 0.01 50V | [M] |
| C6103 | F1H1H103A730 | 0.01 50V | [M] |
| C6111 | ECJ1VF1C104Z | 0.1 16V | [M] |
| C6112 | ECJ1VC1H330J | 33P 50V | [M] |
| C6113 | ECJ1VC1H330J | 33P 50V | [M] |
| C6301 | F1H1H103A730 | 0.01 50V | [M] |
| C6302 | F1H1H103A730 | 0.01 50V | [M] |
| C6303 | ECEA0JKA470B | 47 6.3V | [M] |
| C6307 | F1H1H103A730 | 0.01 50V | [M] |
| C6308 | ECEA0JKA470B | 47 6.3V | [M] |
| C7006 | ECJ1VC1H330J | 33P 50V | [M] |
| C7010 | ECJ1VC1H101J | 100P 50V | [M] |
| C7011 | ECJ1VC1H101J | 100P 50V | [M] |
| C7012 | ECJ1VC1H101J | 100P 50V | [M] |
| C7013 | ECJ1VC1H101J | 100P 50V | [M] |
| C7014 | ECJ1VC1H101J | 100P 50V | [M] |
| C7015 | ECJ2VF1E104Z | 0.1 25V | [M] |
| C7201 | ECEA1VKA100B | 10 35V | [M] |
| C7204 | ECJ2VF1H104Z | 0.1 50V | [M] |
| C7205 | ECJ1VC1H221J | 220P 50V | [M] |
| C7206 | ECJ1VC1H221J | 220P 50V | [M] |
| C7207 | ECJ1VC1H221J | 220P 50V | [M] |
| C7208 | ECJ2VF1E104Z | 0.1 25V | [M] |
| C7209 | ECJ2VF1E104Z | 0.1 25V | [M] |
| C7210 | ECEA1AKA101B | 100 10V | [M] |
| C7211 | ECJ1VC1H270J | 27P 50V | [M] |
| C7212 | ECJ2VF1E104Z | 0.1 25V | [M] |
| C7501 | F1H1H103A730 | 0.01 50V | [M] |
| C7502 | ECJ1VB1H392K | 3900P 50V | [M] |
| C7503 | ECJ1VB1H392K | 3900P 50V | [M] |
| C7504 | ECEA1CKA470B | 47 16V | [M] |
| C7505 | ECEA0JKA101B | 100 6.3V | [M] |
| C7506 | ECJ1VF1C104Z | 0.1 16V | [M] |
| C7602 | ECEA1HKA010B | 1 50V | [M] |
| C7603 | ECEA0JKA470B | 47 6.3V | [M] |
| C7604 | F1H1H103A730 | 0.01 50V | [M] |
| C7605 | ECJ1VC1H330J | 33P 50V | [M] |
| C7709 | ECJ1VB1H182K | 1800P 50V | [M] |
| C7752 | ECEA0JKA331Q | 330 6.3V | [M] |
| C8001 | EEEFC0J101P | 100P 6.3V | [M] |
| C8002 | EEE0GA331WP | 330P 4V | [M] |
| C8003 | ECJ1VB1H222K | 2200P 50V | [M] |
| C8004 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8005 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8006 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8007 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8008 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8009 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8010 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8011 | F1H0J1050013 | 1 6.3V | [M] |
| C8012 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8013 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8014 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8015 | F1H0J1050013 | 1 6.3V | [M] |
| C8016 | F1H0J1050013 | 1 6.3V | [M] |
| C8017 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8018 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8019 | F1H0J1050013 | 1 6.3V | [M] |
| C8020 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8021 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8022 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8023 | F1H0J1050013 | 1 6.3V | [M] |
| C8024 | ECJ1VB1H222K | 2200P 50V | [M] |
| C8025 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8026 | F1H0J1050013 | 1 6.3V | [M] |
| C8027 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8028 | F1H0J1050013 | 1 6.3V | [M] |
| C8031 | ECJ1ZF1C104Z | 0.1 16V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C8051 | F1H0J1050013 | 1 6.3V | [M] |
| C8052 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8053 | ECJ1VC1H221J | 220P 50V | [M] |
| C8054 | F1H0J1050013 | 1 6.3V | [M] |
| C8055 | F1H0J1050013 | 1 6.3V | [M] |
| C8056 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8057 | ECJ1VB1H222K | 2200P 50V | [M] |
| C8111 | F1H1C104A042 | 0.1 16V | [M] |
| C8112 | ECJ2FB1A105K | 1 10V | [M] |
| C8113 | ECJ1VC1H471J | 470P 50V | [M] |
| C8201 | EEE0JA101WR | 100P 6.3V | [M] |
| C8202 | EEEFC0J101P | 100P 6.3V | [M] |
| C8203 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8204 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8205 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8206 | F1H0J1050013 | 1 6.3V | [M] |
| C8207 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8208 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8211 | ECJ1VB1C333K | 0.033 16V | [M] |
| C8212 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8213 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8214 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8215 | ECJ1VB1H562K | 5600P 50V | [M] |
| C8216 | ECJ1VB1C183K | 0.018 16V | [M] |
| C8217 | F1H0J1050013 | 1 6.3V | [M] |
| C8218 | F1H0J1050013 | 1 6.3V | [M] |
| C8221 | F1H1C104A042 | 0.1 16V | [M] |
| C8222 | F1H1C104A042 | 0.1 16V | [M] |
| C8223 | F1H1C104A042 | 0.1 16V | [M] |
| C8224 | F1H1C104A042 | 0.1 16V | [M] |
| C8225 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8226 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8227 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8228 | ECJ2FB1A105K | 1 10V | [M] |
| C8229 | ECJ2FB1A105K | 1 10V | [M] |
| C8232 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8233 | ECJ1VB1H472K | 4700P 50V | [M] |
| C8234 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8235 | ECJ1VC1H102J | 1000P 50V | [M] |
| C8236 | ECJ1VC1H102J | 1000P 50V | [M] |
| C8237 | ECJ1VC1H102J | 1000P 50V | [M] |
| C8238 | ECJ1VC1H821J | 820P 50V | [M] |
| C8241 | F1H1C104A042 | 0.1 16V | [M] |
| C8242 | F1H1C104A042 | 0.1 16V | [M] |
| C8251 | EEEFC0J221P | 220P 6.3V | [M] |
| C8252 | EEE1CA220WR | 22P 16V | [M] |
| C8253 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8254 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8255 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8261 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8271 | EEEFC1C470P | 47 16V | [M] |
| C8272 | EEE0JA330WR | 33P 6.3V | [M] |
| C8273 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8274 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8275 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8284 | ECJ1VB1H103K | 0.01 50V | [M] |
| C8285 | ECJ1VB1H103K | 0.01 50V | [M] |
| C8286 | ECJ1VB1H103K | 0.01 50V | [M] |
| C8287 | F1H1C104A042 | 0.1 16V | [M] |
| C8288 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8301 | EEE0JA221WP | 220P 6.3V | [M] |
| C8302 | EEE0JA330WR | 33P 6.3V | [M] |
| C8303 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8304 | F1H0J1050013 | 1 6.3V | [M] |
| C8307 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8311 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8312 | F1H0J1050013 | 1 6.3V | [M] |
| C8400 | ECJ1VC1H150J | 15P 50V | [M] |
| C8420 | F2G0J331A015 | 330P 6.3V | [M] |
| C8423 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8424 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8451 | F3F1A106A001 | 10 10V | [M] |
| C8452 | F3F1A106A001 | 10 10V | [M] |
| C8453 | F3F1A106A001 | 10 10V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C8455 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8456 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8461 | F2G0J101A015 | 100P 6.3V | [M] |
| C8462 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8501 | F1K1A1060017 | 10 10V | [M] |
| C8502 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8503 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8504 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8505 | ECJ1VC1H221J | 220P 50V | [M] |
| C8506 | ECJ1VC1H101J | 100P 50V | [M] |
| C8550 | EEE0JA330WR | 33P 6.3V | [M] |
| C8551 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8552 | EEEFC1C100R | 1C0P 16V | [M] |
| C8553 | EEE0JA470WR | 47P 6.3V | [M] |
| C8554 | F1H0J1050013 | 1 6.3V | [M] |
| C8561 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8562 | EEEFC1C100R | 1C0P 16V | [M] |
| C8563 | EEE0JA470WR | 47P 6.3V | [M] |
| C8564 | F1H0J1050013 | 1 6.3V | [M] |
| C8601 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8605 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8606 | ECJ1VB1A224K | 0.22 10V | [M] |
| C8611 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8621 | ECJ1VC1H390J | 39P 50V | [M] |
| C8622 | ECJ1VC1H050D | 5P 50V | [M] |
| C8651 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8652 | ECJ1ZF1C104Z | 0.1 16V | [M] |
| C8691 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C8695 | ECJ0EF1C104Z | 0.1 16V | [M] |
| C33001 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C33002 | ECA1CHJ221B | 220 16V | [M] |
| C33003 | ECA1CHJ221B | 220 16V | [M] |
| C33004 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C33005 | ECEA1HKA4R7B | 4.7 50V | [M] |
| C33006 | F1H1C104A065 | 0.1 16V | [M] |
| C33007 | ECEA1AKA470B | 47 10V | [M] |
| C33008 | ECEA1AKA470B | 47 10V | [M] |
| C33009 | F1H1C104A065 | 0.1 16V | [M] |
| C33010 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C33011 | ECEA1CKA470B | 47 16V | [M] |
| C33014 | F2A1A221A206 | 220P 10V | [M] |
| C33015 | F2A1A221A206 | 220P 10V | [M] |
| C33017 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C33018 | ECJ1VF1H104Z | 0.1 50V | [M] |
| C33019 | ECJ1VF1H104Z | 0.1 50V | [M] |
| C33501 | F2A1A221A206 | 220P 10V | [M] |
| C33502 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C33503 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C33504 | ECJ1VB1H103K | 0.01 50V | [M] |
| C33505 | F1H1C104A065 | 0.1 16V | [M] |
| C33506 | F1H1C104A065 | 0.1 16V | [M] |
| C33507 | F1H0J1050013 | 1 6.3V | [M] |
| C33508 | F1H0J1050013 | 1 6.3V | [M] |
| C33509 | F2A0J102A247 | 1000P 6.3V | [M] |
| C33510 | ECEA0JKA101B | 100 6.3V | [M] |
| C33511 | F2A0J102A247 | 1000P 6.3V | [M] |
| C33512 | ECEA0JKA101B | 100 6.3V | [M] |
| C33513 | F2A0J102A247 | 1000P 6.3V | [M] |
| C33514 | ECEA0JKA101B | 100 6.3V | [M] |
| C33515 | ECA0JM331B | 330 6.3V | [M] |
| C33517 | ECA0JM331B | 330 6.3V | [M] |
| C33522 | ECEA0JKA220B | 22 6.3V | [M] |
| C33531 | ECJ1VB1H103K | 0.01 50V | [M] |
| C34010 | F2A1A221A206 | 220P 10V | [M] |
| C34012 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C34013 | ECEA1HKA4R7B | 4.7 50V | [M] |
| C34015 | ECEA1HKA4R7B | 4.7 50V | [M] |
| C34405 | ECJ1VB1H102K | 1000P 50V | [M] |
| C34414 | ECEA1CKA470B | 47 16V | [M] |
| C34415 | ECEA1CKA470B | 47 16V | [M] |
| C34427 | ECJ1VB1H102K | 1000P 50V | [M] |
| C36001 | ECA0JM101B | 100 6.3V | [M] |
| C36002 | F1H1C104A065 | 0.1 16V | [M] |
| C36003 | F1H1C104A065 | 0.1 16V | [M] |

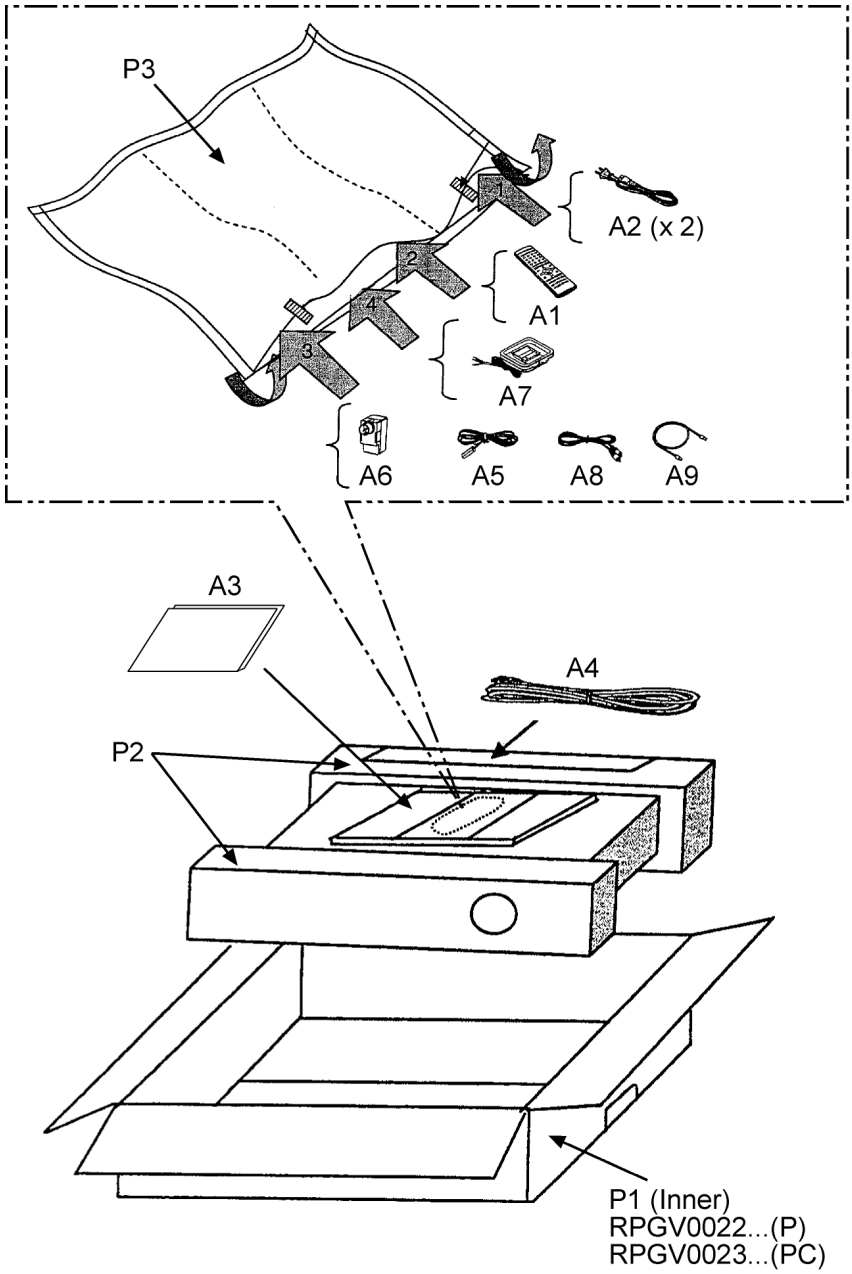
| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C36004 | ECJ1VC1H331J | 330P 50V | [M] PC |
| C36005 | ECJ1VC1H331J | 330P 50V | [M] PC |
| C36006 | ECJ1VB1E223K | 0.022 25V | [M] PC |
| C36007 | ECJ1VC1H331J | 330P 50V | [M] PC |
| C36008 | F1H1C104A065 | 0.1 16V | [M] |
| C36009 | ECEA1AKA220B | 22 10V | [M] |
| C36011 | ECA1HM2R2B | 2.2 50V | [M] |
| C36013 | ECA0JM102B | 1000 6.3V | [M] |
| C36014 | ECJ2VF1E104Z | 0.1 25V | [M] |
| C36015 | ECJ1VF1H103Z | 0.01 50V | [M] |
| C36016 | ECJ2VF1E104Z | 0.1 25V | [M] |

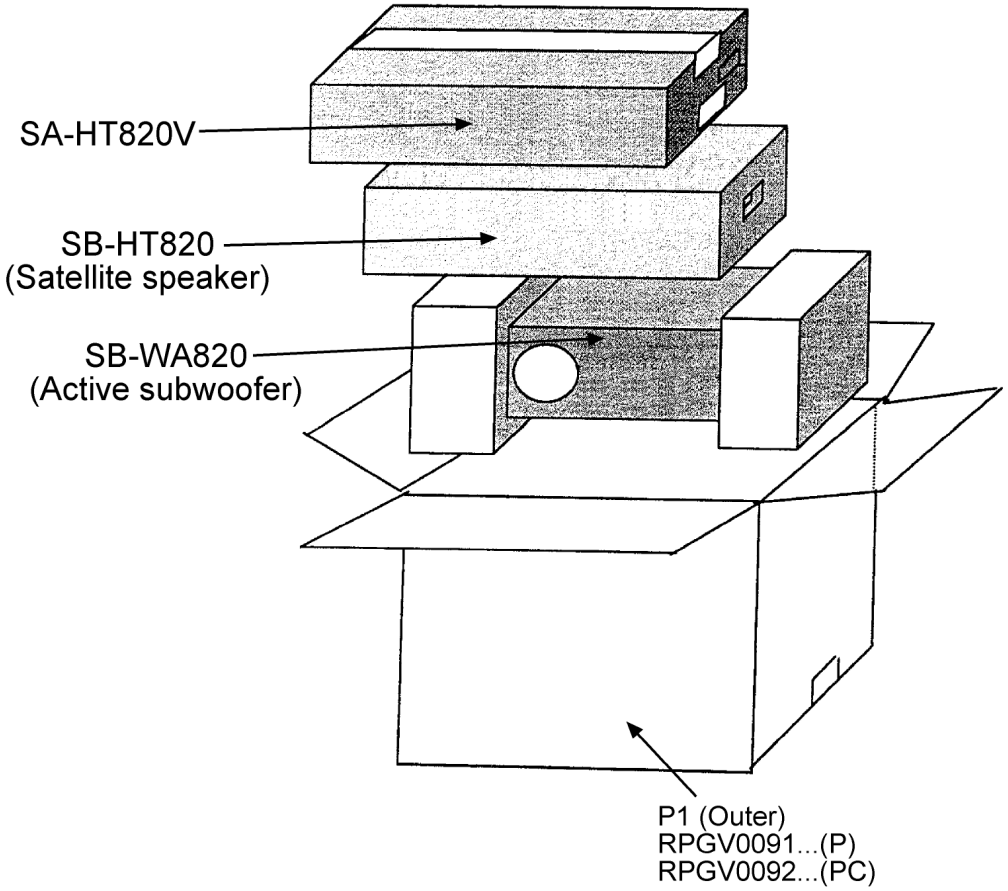
## 25.5. Packing Materials & Accessories Parts List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | PACKING MATERIALS | |
| | | | |
| P1 | RPGV0022 | PACKING CASE (INNER) | [M] P |
| P1 | RPGV0023 | PACKING CASE (INNER) | [M] PC |
| P1 | RPGV0091 | PACKING CASE (OUTER) | [M] P |
| P1 | RPGV0092 | PACKING CASE (OUTER) | [M] PC |
| P2 | RPNV0015 | POLYFOAM | [M] |
| P3 | VPF1131 | POLYBAG | [M] |
| | | | |
| | | ACCESSORIES | |
| | | | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| A1 | EUR7722X20 | REMOTE CONTROL | [M] |
| A1-1 | UR76EC3103A | R/C BATTERY COVER | [M] |
| A2 | K2CB2CB00006 | AC CORD | [M] ⚠ |
| A3 | RQT7388-P | OI BOOK (En) | [M] |
| A3 | RQT7389-C | OI BOOK (Cf) | [M] PC |
| A4 | K1HA25HA0001 | SYSTEM CABLE | [M] |
| A5 | RSA0007-L | FM ANTENNA WIRE | [M] |
| A6 | K2RC021B0001 | ANTENNA PLUG | [M] |
| A7 | N1DAAAA00002 | AM LOOP ANTENNA | [M] |
| A8 | RJL1P016B15A | VIDEO CABLE | [M] |
| A9 | VJA1125 | RF CABLE | [M] |

## 25.6. Packaging




SA-HT820V
SB-HT820
(Satellite speaker)
SB-WA820
(Active subwoofer)
P1 (Outer)
RPGV0091...(P)
RPGV0092...(PC)